

China's National Defense Mobilization System: Foundation for Military Logistics

Erin Richter, Defense Intelligence Agency
and
Ben Rosen, SOSi Center for Intelligence Research and Analysis

The People's Republic of China's (PRC's) national defense mobilization system is a vital component of its national defense strategy. The national defense mobilization system touches almost all aspects of the organizational infrastructure that supports the People's Liberation Army (PLA). This paper provides an overview of this system at the national and provincial levels, details how the system is expressed in the economic mobilization and transportation mobilization sectors that are critical to PLA logistics support, and recent changes to national defense mobilization laws. Finally, this paper discusses information systems that the PRC has built and is building to keep track of its mobilized and mobilizable resources and the improvements to the national defense mobilization system that are anticipated to result from these changes.

China's National Defense Mobilization System

Mobilization of civilian resources is critical to PLA logistics and to the sustainment of military operations. The PRC's national defense mobilization (国防动员) system is a centrally-planned, systematic effort to leverage the nation's entire resource potential to prepare for, support, and sustain national defense operations in war or emergencies.¹ It is an extension of Mao Zedong's foundational concept of the "People's War" (人民战争), whereby the strength of the whole people is used to fight against the invaders and defend the nation.² National defense mobilization involves mobilization of China's manpower, material, financial, infrastructure, industrial, science, and technology resources for wartime or other emergency requirements. It also involves generating necessary political and popular support for mobilization.³

National Defense Mobilization Authorities

Responsibility for national defense mobilization formulation and implementation activities is divided between the State Council and Central Military Commission (CMC). According to the 2020 National Defense Law of China (中华人民共和国国防法), the State is required to incorporate national defense mobilization readiness into its overall development programs and plans in order to increase its potential and capacity for national defense."⁴ The National Defense Law stipulates that on issues related to national defense mobilization, the State Council shall:

- Lead and administer national defense development, including planning, administration, budgeting, research, and production.

- Jointly with the CMC, lead the development of militias, conscription work, and administration of border defense, maritime defense, air defense, and defense of other critical security domains (for example, cybersecurity).
- Lead and administer economic mobilization and the development, organization, and implementation of civil air defense, national defense transportation, and other matters.
- Lead and administer the work of supporting the military, providing preferential treatment to the families of servicepersons and martyrs, and ensuring veterans benefits and services.⁵

The National Defense Law directs the CMC to lead the armed forces of the PRC, including management of armed forces mobilization and reserve work.⁶

To implement the actions stipulated under the National Defense Law, the State Council and the CMC are required to establish a mechanism for coordinating the resolution of major national defense issues.⁷ The 2010 National Defense Mobilization Law of the PRC indicates that for national defense mobilization, this coordination mechanism shall be the National Defense Mobilization Commission (NDMC) (国家国防动员委员会).⁸ The NDMC was initially established in 1994 under the leadership of the State Council and CMC to formulate defense mobilization policies, organize, direct, and coordinate national defense mobilization work for the PRC.⁹ Under the guidance of the NDMC, governments down to the county level form their own NDMCs to incorporate national defense mobilization requirements into their economic, social development, and combat readiness plans.¹⁰

National Defense Mobilization Commission

As of early 2022, Premier of the State Council (中华人民共和国国务院) Li Keqiang (李克强) serves as the National NDMC Director, Secretary-General of the State Council Xiao Jie (肖捷) and Minister of National Defense Wei Fenghe (魏凤和) serve as its Deputy Directors, and CMC National Defense Mobilization Department (NDMD) Director Lieutenant General Sheng Bin (盛斌) serves as the NDMC Secretary-General.^{11 12 13} The Secretary-General is responsible for assisting the NDMC leadership in planning, organization, and comprehensive coordination of national defense mobilization. In his capacity as NDMC Secretary-General, the CMC NDMD Director also leads the NDMC General Office which is responsible for national defense mobilization planning, policy formulation, regulatory research, organization and coordination, and secretarial services.¹⁴ As of 2018, the NDMC likely included the following organizations:¹⁵

16 17

Classification: UNCLASSIFIED
Conference Paper – Not for Citation, Distribution, or Publication

Table 1. 2017-2018 Composition of the NDMC

Relevant Departments of the Central Military Commission	Central Organization Department (中国共产党中央委员会组织部)
Central Propaganda Department (中国共产党中央委员会宣传部) ¹⁸	State Commission Office for Public Sector Reform (中央机构编制委员会办公室)
National Development and Reform Commission (国家发展和改革委员会)	Ministry of Education (教育部)
Ministry of Science and Technology (科学技术部)	Ministry of Industry and Information Technology (工业和信息化部)
Ministry of Public Security (公安部)	Ministry of Civil Affairs (民政部)
Ministry of Justice (司法部)	Ministry of Finance (财政部)
Ministry of Human Resources and Social Security (人力资源和社会保障部)	Ministry of Natural Resources (中华人民共和国自然资源部) ¹⁹
Ministry of Housing and Urban-Rural Development (住房和城乡建设部)	Ministry of Transport (交通运输部)
Ministry of Commerce (商务部)	Ministry of Culture and Tourism (中华人民共和国文化和旅游部) ²⁰
National Health Commission (国家卫生健康委员会) ²¹	State-owned Assets Supervision and Administration Commission (国务院国有资产监督管理委员会)
Ministry of Veterans Affairs (中华人民共和国退役军人事务部)	National Bureau of Statistics (国家统计局)
All-China Federation of Trade Unions (中华全国总工会)	Central Committee of the Communist Youth League (共产主义青年团)
All-China Women's Federation (中华全国妇女联合会)	Ministry of Emergency Management (中华人民共和国应急管理部) ²²

National defense mobilization work under the NDMC is organized along functional lines of effort which include:

- People's Armed Forces Mobilization (人民武装动员) – Reserve and militia force construction, training, and combat readiness.²³
- Civil Air Defense Mobilization (人民防空) – Mobilization and command of forces to protect critical facilities and respond to natural disasters, industrial accidents, epidemics, and attacks. Includes supervision of civil air defense engineering and construction,

including construction of hardened government command facilities and shelters to safeguard the population and critical materials.²⁴

- Transportation Mobilization (交通战备) – Construction and use of transportation resources to support national defense requirements, including dual military-civilian use infrastructure and equipment; the security of national defense transportation routes and resources; and mobilization of transportation manpower and equipment resources.²⁵
- National Economic Mobilization (国民经济动员) – Transfer of the State’s economic capacity from a peacetime to wartime state to meet the demands of a war, sudden incident, or emergency. Includes mobilization of industrial, agricultural, medical, information, science and technology, financial, industrial, material reserves, and associated manpower resources.²⁶
- Information Mobilization (信息动员) – Regulation of information resources, technology development, personnel training, infrastructure construction, and information management to support national defense requirements. Includes the appropriation and allocation of information resources, electromagnetic spectrum management, information security, and information networks.^{27 28 29} Managed by the NDMC Information Mobilization Office (信息动员办公室)
- Political Mobilization (政治动员) – Activities to mobilize the people and the army to participate in and support national defense mobilization. Includes use of mass media such as television, radio, newspapers, and the Internet to carry out extensive propaganda campaigns to “arouse the patriotic enthusiasm of the army and civilians and create a strong atmosphere for participating in the war.”³⁰ Includes National Defense Education activities.³¹

The NDMC has a number of working offices responsible for coordinating activities along each mobilization line of effort. The working offices are managed by standing military and civilian government organizations. The directors or deputy directors of these organizations are responsible for overseeing the operations of their assigned organization in addition to their mobilization duties.^{32 33 34} Each NDMC office likely has a small permanent staff to manage the military-civilian coordination activities associated with defense mobilization. These activities include mobilization planning and data collection, pairing military mobilization requirements with mobilization potential, inspecting defense mobilization work, drafting regulations and guiding documents, and collaborating with relevant institutions on improvements to defense mobilization systems.

Table 2. NDMC Working Offices

NDMC Office	Corresponding Military Managing Organization
NDMC General Office (国家国防动员委员会综合办公室)	CMC National Defense Mobilization Department General Office (中央军委国防动员部办公厅) ³⁵
National People's Armed Forces Mobilization Office (国家人民武装动员办公室)	CMC National Defense Mobilization Department General Office (中央军委国防动员部办公厅) ³⁶
National Civil Air Defense Office (国家人民防空办公室)	CMC National Defense Mobilization Department Civil Air Defense Bureau (中央军委国防动员部人防局) ^{37 38}
National Transportation War Readiness Office (国家交通战备办公室)	CMC Logistics Support Department Transportation and Delivery Bureau (中央军委后勤保障部运输投送局) ³⁹
National Economic Mobilization Office (国家经济动员办公室)	National Development and Reform Commission (NDRC) Economic and Defense Coordinated Development Department (国家发展和改革委员会经济与国防协调发展司) (Also known as NDRC National Defense Office (NDO) (国家发改委国防司) ⁴⁰
National Defense Education Office (国家国防教育办公室)	CMC National Defense Mobilization Department Political Work Bureau (中央军委国防动员部政治工作局) ⁴¹

National Defense Mobilization Department

The CMC NDMD (中央军事委员会国防动员部), one of 15 organizations directly subordinate to the CMC, is responsible for national defense mobilization planning, coordination, reserve and militia force management, civil air defense and border defense operations, and command of provincial Military Districts (MDs) (省军区).^{42 43} Established in 2015, the NDMD succeeded the former General Staff Department Mobilization Department. The NDMD leads the majority of national defense mobilization work, in coordination with the NDRC NDO. The NDMD includes the following organizations:

- General Office (中央军委国防动员部办公厅) - Assists the NDMC in handling matters related to national defense mobilization, and manages the comprehensive planning, organization and coordination, theoretical research, and secretarial services for the NDMD.⁴⁴
- Political Work Bureau (政治工作局) - Responsible for NDMD political work, including ensuring political reliability of NDMD personnel, human resource assignments, and political education.⁴⁵ The director of the Political Work Department is concurrently the director of the NDMC National Defense Education Office.⁴⁶
- Mobilization Recruitment Bureau (动员征集局) – Responsible for military conscription and recruitment in collaboration with various PLA and State Council organs through the Joint Conference System of the National Recruitment Work.^{47 48} The director of the Mobilization Recruitment Department also holds the position of director of the Ministry of National Defense-subordinated Recruitment Office (征兵办公室).⁴⁹

- Militia Reserve Bureau (民兵预备役局) - Manages militia and reserve force policy formulation, organization, and training.⁵⁰ PLA militia and reserves were formerly controlled by the provincial Military Districts (省军区, MDs) but transitioned to the control of the NDMD in 2016.⁵¹
- Border Defense Bureau (边防局) – Responsible for national border and coastal defense work.⁵² The Border Defense Department leads the National Border and Coastal Defense Committee (国家边海防委员会) in developing and promulgating policies relevant to border and coastal defense units of the PLA and the Ministry of Public Security.^{53 54} The NDMD Border Defense Department also likely collaborates with the NDRC to develop and deploy smart border and coastal defense systems.⁵⁵
- Civil Air Defense Bureau (人防局) – Responsible for coordination of civil defense tasks.⁵⁶ The director of the Civil Air Defense Bureau serves concurrently as the director of the National Civil Air Defense Office (国家人民防空办公室), the administrative department responsible for organizing the masses to take protective measures for preventing or minimizing damage caused by air raids. These organizations are responsible for formulating civil defense policies, organizing and managing national civil air defense construction, and organizing and carrying out civil defense and related rescue operations.^{57 58}

Theater, Provincial and Local Defense Mobilization

While the national-level NDMC and NDMD develop mobilization policies and plans, most mobilization activities occur at the theater level and below. Each Theater Command (TC) Joint Operations Command Center (战区联合作战指挥中心 JOCC) has a Theater Mobilization Bureau (战区动员局) in charge of reviewing mobilization needs within the Theater, as well as tracking mobilization activities conducted in the provincial MDs within the Theater.⁵⁹

Below the TCs, mobilization activities are supervised by provincial NDMCs and MDs. NDMCs are established at every level of government down to the county-level to coordinate military-civilian national defense mobilization activities.⁶⁰ Most national defense mobilization work is managed by provincial-level governments and associated NDMCs as well as through the provincial MD system.⁶¹ According to the commander of the Ningxia MD, the provincial NDMC is the highest executive-level organization responsible for the implementation of national and theater mobilization orders.⁶²

Provincial and below governments work collaboratively with provincial-MDs, through NDMCs, to match mobilization resource potential with military requirements, direct military-civilian dual use production and infrastructure construction activities, mobilize and deploy resources to support the military, and actively support joint operations. While provincial-level and below NDMC organizational structures resemble the national-NDMC, they vary across jurisdictions based on operational demands and a jurisdiction's distinct geographic, industrial, infrastructure,

and social characteristics.⁶³ Provincial-level NDMCs are led by the provincial party committee, with the General Secretary serving as director and the provincial governor and MD commander serving as NDMC deputy directors.^{64 65} According to the commander of the Ningxia MD, provincial MD deputy commanders, the provincial government secretary general, and leaders of People's Armed Police (PAP) command in each province also participate in NDMC decision-making. These officials are responsible for determining national defense mobilization tasks, reviewing action plans, and organizing and directing national defense mobilization operations.⁶⁶ Leaders from provincial party committees and government functional departments are included in NDMC deliberations as necessary to provide advise related to specific mobilization tasks.⁶⁷

Provincial-level NDMC working offices include People's Armed Forces, Economic, Transportation War Readiness, Civil Air Defense, Information, Science and Technology, and National Defense Education Mobilization Offices.^{68 69 70} Provincial-level government offices are usually tasked to lead NDMC working offices, often with a deputy director assigned by the MD, to ensure effective military-civilian coordination.⁷¹ For example, in Hubei Province the director of the provincial MD Combat Readiness Construction Bureau also serves as deputy director of the provincial Civil Air Defense Office to ensure mobilization activities support military requirements, and the military is appropriately leveraged to support local emergency response activities.⁷²

Military Districts

Each MD headquarters is responsible for a single province or autonomous region and bears its province or region's name. MDs are responsible for military-civilian coordination within their jurisdiction, including mobilization planning, conscription, and management of militia units.^{73 74} MDs coordinate mobilization with provincial and below governments as directed by Theater Commands (TCs).⁷⁵ MDs are assessed by and receive policy guidance from the NDMD.⁷⁶ MD subordinate organizations include:⁷⁷

- General Office (办公室) – supports the provincial-NDMC General Office, receives and aggregates mobilization requirements, quantifies and verifies mobilization capacity, formulates mobilization resource allocation and use plans, organizes and implements mobilization actions. May serve as the provincial NDMC General Office.
- Political Work Bureau (政治工作局) – supports provincial political mobilization work, public opinion and legal struggle, cadre appointments, discipline inspection, propaganda, and national defense education work. The provincial MD political commissar acts as deputy to the provincial party chief in managing political mobilization.
- Combat Readiness Construction Bureau (战备建设局) - organizes, training, and manages forces for mobilization operations, including security tasks by militia, public security, armed police, and counterterrorism organizations.

- National Defense Mobilization Bureau (国防动员局) - manages mobilization requirements and collaborates with provincial offices to identify and assess local mobilization potential, to develop plans for mobilization of necessary resources.
- Support Bureau (保障局) – organizes operational support, logistics support, and general support for national defense activities, including communications, cryptologic, hydrologic, meteorological, transportation, fuel, barracks, health services, and maintenance.⁷⁸

MDs command military subdistricts (MSD), aligned to prefectures, cities, and counties within the MD area of responsibility. MSD perform the same roles as MDs within their jurisdiction and supervise the activities of local People's Armed Forces Departments (PAFDs).⁷⁹ PAFDs are responsible for meeting local conscription quotas and formation of militias as directed by MDs and MSDs. PAFDs also assist in training and logistics support for units in their areas. Local PAFDs provide peacetime command for militia units in their areas of responsibility. County, city, and municipal PAFD headquarters are manned by active-duty PLA officers, while PAFD headquarters at township or subdistrict levels are led by local civilian cadres.^{80 81}

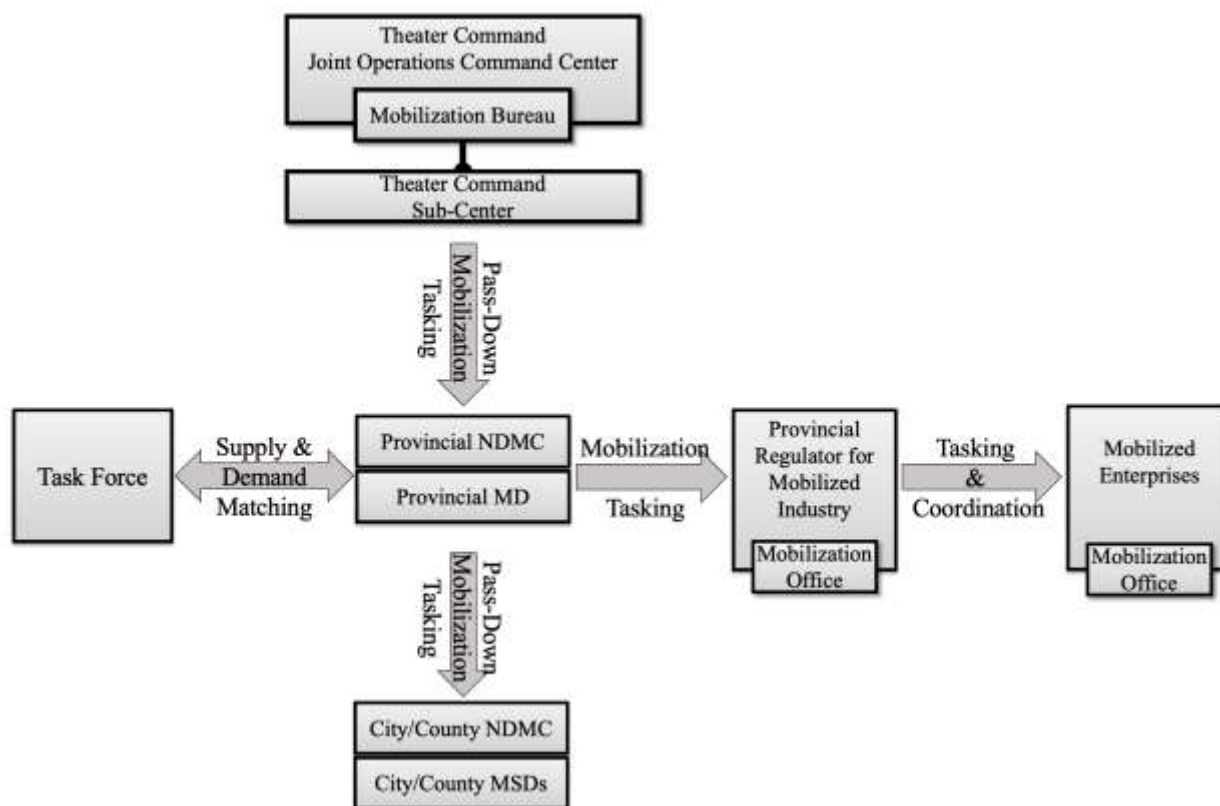


Figure 1: Provincial Mobilization and Command Flows⁸²

Mobilization Support to Military Logistics

The national defense mobilization system is a critical enabler of PRC military logistics operations. Through this system, the military can access necessary resources to support combat, emergency response, internal security, border and coastal defense, and other national defense activities. Military-civilian integrated development of support infrastructure and equipment, as well as civilian enterprise and professional technical support provide the military with logistics capacity without the expense of dedicated military investment. Dual-use programs and subsidized logistics related enterprises support national strategic goals of economic development while ensuring that national defense needs are met.

Economic Mobilization System

National economic mobilization is a series of activities that are implemented to meet the demand of war, sudden incident, or emergency, in which the state, in a planned and organized manner, converts national economic activity and corresponding systems from a peacetime to wartime state.⁸³ Within China, economic mobilization is critical to supporting and sustaining PLA operations.

Economic Mobilization is led by the National Development and Reform Commission's (NDRC) Department of Economic and National Defense Coordinated Development (NDCD) (国家发展和改革委员会经济与国防协调发展司), often referred to as the National Defense Office (NDO) (国防司). The NDO is responsible for organizing the formulation of strategies and plans for promoting the coordinated development of the economy and of national defense construction (military-civilian fusion).⁸⁴ The NDO also assumed the duties of the former NDRC national Economic Mobilization Office (EMO) in 2014, and the responsibility for leading economic mobilization work in the government system.⁸⁵ The NDRC is the only NDMC leading body outside the PLA.⁸⁶

Two NDRC Deputy Directors, Lian Weiliang (连维良) and Cong Liang (丛亮) are responsible for supervision of NDO activities as well as the activities of several other NDRC departments.⁸⁷ Liu Ming (刘明) serves as NDO party secretary and is dual-hatted as director of the national EMO.^{88 89}

The NDO is designed to serve as the central coordination mechanism for government ministries and institutions under the State Council. Development and Reform Commission (DRC) offices serve this function at provincial levels and below. These offices promulgate policies and standards for identifying the resources available for national defense mobilization and development of dual-use industries and infrastructure; prepare and implement economic mobilization plans; and coordinate economic mobilization drills, combat and emergency response activities.⁹⁰ The NDO probably collaborates closely with the Ministry of Industry and Information Technology (MIIT), Ministry of Finance, National Bureau of Statistics, Ministry of Transportation, and State-owned Assets Supervision and Administration Commission (SASAC) on economic mobilization issues.^{91 92 93 94} Provincial and below DRCs manage EMOs for their

jurisdiction and similarly coordinate with the provincial-level equivalents of these national-level institutions, as well as a number of other departments responsible for complementary functions.⁹⁵
96 97

Economic Mobilization Requirements Management Process

Economic mobilization requirements are submitted by the military both horizontally and vertically. Military units submit mobilization requirements to the MSD or MD in which the unit is garrisoned, is operating, or is transiting through. The MD is responsible for transmitting these requirements to the TC and for identifying those it is unable to support. TC will consolidate these requirements, attempt to balance resources across MDs to satisfy requirements, then transmit to the NDMD those requirements that cannot be satisfied. The NDMD, in collaboration with the CMC Logistics Support Department and Equipment Development Department, will identify unfulfilled mobilization requirements to the NDRC NDO, which will in turn coordinate across the government to mobilize the necessary resources.⁹⁸

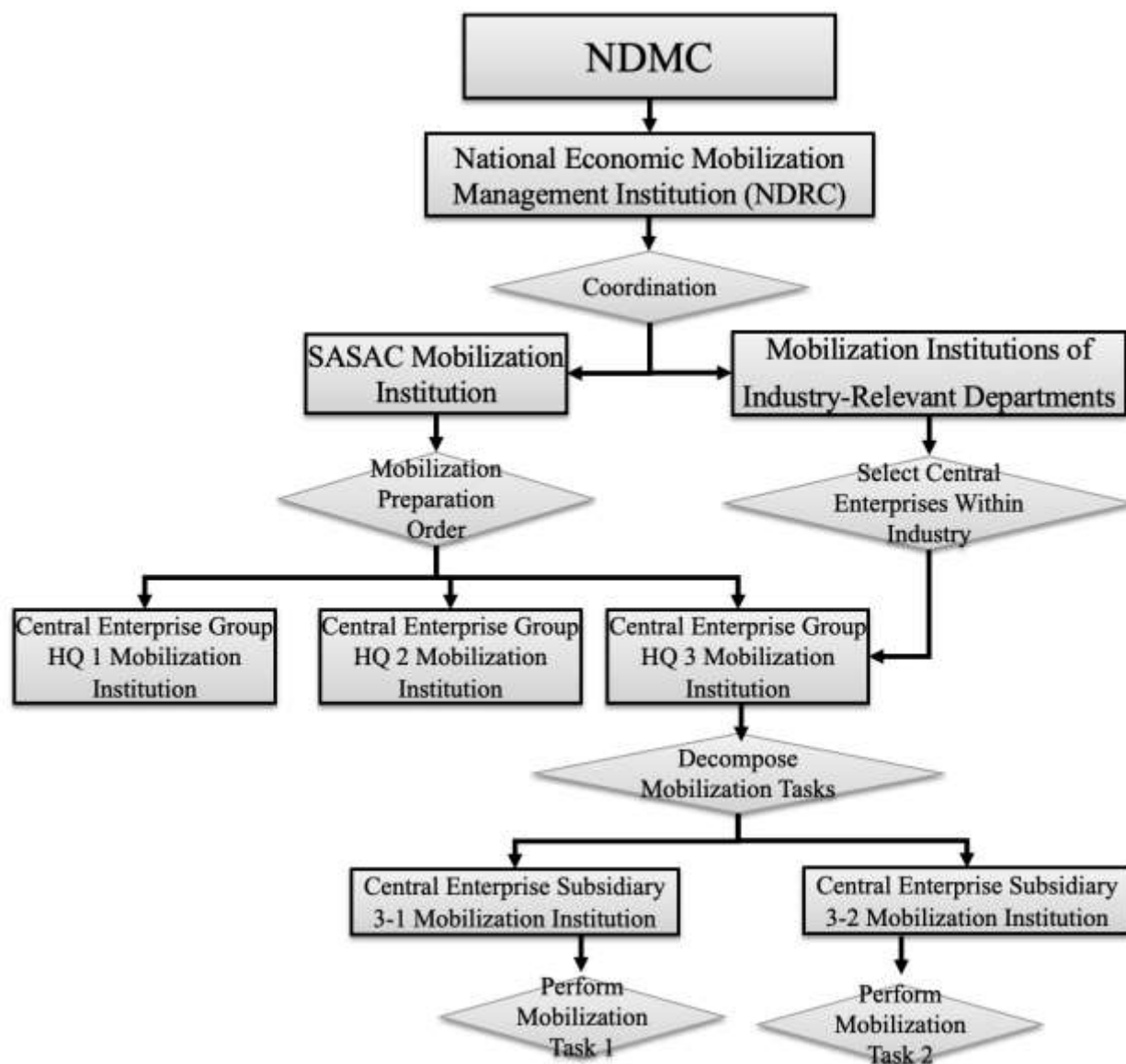


Figure 2: Central Enterprise National Peoples Economic Mobilization Procedures⁹⁹

Information and Industrial Mobilization

Information mobilization is a subset of economic mobilization and includes measures the state takes to mobilize civil information resources including production of dual use information technologies and equipment, mobilization of manpower resources to manage and protect the transmission of war-related information, and the mobilization of information technology products for wartime use.¹⁰⁰ Similarly, industrial mobilization is the conversion of science and technology, chemical, energy, textile, food, medical equipment, and pharmaceutical manufacturing industries to a wartime state.¹⁰¹ In coordination with the NDRC, SASAC and MIIT are responsible for coordinating many of these mobilization activities.¹⁰²

State Owned Enterprises Mobilization

SASAC is responsible for supervising the state-owned assets of enterprises under the central government of the PRC (excluding financial enterprises) and for enhancing the management of state owned assets.¹⁰³ The NDRC NDO coordinates with SASAC for the national defense mobilization work of 96 central State Owned Enterprises (SOEs), each of which operates dozens to hundreds of globally dispersed subsidiaries.^{104 105} According to an author affiliated with the Beijing Institute of Technology National Economic Mobilization Research Center, SASAC has established a mobilization agency to comprehensively lead and manage the economic mobilization work of the SASAC system. However, which SASAC organization has assumed these responsibilities remains unclear.^{106 107} Local SOEs also provide significant mobilization potential but are generally leveraged by provincial and below NDMCs.

SOEs form the core of the national economic mobilization system due to the CCP's ability to control their activities. SOEs also control a large market share of resources essential for national defense, including weapons production, petroleum, agricultural products, construction equipment, etc.; with a reliable product quality due to government oversight. In addition, many of these enterprises are involved in work that is directly related to national defense and national security. Therefore, effective oversight and military-civilian communications mechanisms have already been established.¹⁰⁸ SOEs also have a relatively complete organizational system both to inform mobilization planning and to mobilize and deploy resources for contingencies. All central SOEs have Party Central Committees which serve as a conduit for the organization and direction of mobilization work. Most have emergency management regulations that outline emergency response procedures, organization, and responsibilities. These emergency response procedures can be easily used to coordinate mobilization to support wartime requirements.¹⁰⁹

In 2021, a researcher working for the NDRC's Economics and National Defense Coordination Development Research Center (经济与国防协调发展研究中心) laid out a rubric for how the NDRC classifies central SOEs based on economic mobilization potential according to the size and market-share. Beijing will prioritize economic mobilization, drawing resources from these enterprises first, as they have the greatest mobilization potential.^{110 111}

Table 3: Classification of central enterprises based on mobilization demand¹¹²

Type	Coverage Process	Example	Field
Diamond-Level	Almost monopoly, completely covering mobilization needs	1. Various large military industry groups 2. PetroChina, Sinopec, CNOOC 3. China Telecom, China Mobile, China Unicom 4. Aviation, Railway, China Communications Construction Corporation	1. Equipment Mobilization 2. Refined Oil Mobilization 3. Communications Mobilization 4. Transportation Mobilization

Platinum-Level	Coverage of more than 50% of mobilization needs	1. COFCO 2. Baowu and Anshan Iron and Steel 3. FAW, Dongfeng	1. Food-Oil Mobilization 2. Steel Mobilization 3. Heavy Vehicle Mobilization
Gold-Level	Coverage of more than 30% of mobilization needs	1. Chinese Traditional Medicine 2. China Resources Holdings Company	1. Medical Mobilization 2. Foodstuffs, Drinking-water Mobilization

Ministry of Industry and Information Technology

MIIT plays a significant role in regulating and managing China's telecommunications and software sectors, electronics and information technology manufacturing industries, and defense industries through its management of State Administration of Science, Technology and Industry for National Defense (SASTIND) (国家国防科技工业局).¹¹³ The NDRC NDO coordinates with MIIT for economic mobilization of China's industries in a manner similar to SASAC's management of SOEs.¹¹⁴ The MIIT subordinate Operation Monitoring and Coordination Bureau (运行监测协调局) is responsible for monitoring and analysis of the industry and communications sectors, coordinating solutions for problems within these industries, managing emergencies, industrial security, and national defense mobilization work.¹¹⁵ MIIT's Information Communications Authority (信息通信管理局) is responsible for national defense communications information mobilization and readiness communications-related work.¹¹⁶ Which of these two offices is designated the national-level Information Mobilization Office (IMO) after the 2018 State Council reform is unclear.

IMOs are established by NDMCs at the provincial-level and below to draft information mobilization plans and regulations, coordinate mobilization resource potential surveys, manage information resource requisition, and coordinate wartime information support activities.¹¹⁷ IMOs are also responsible for the development, management, and security of national defense mobilization information systems and the telecommunications necessary for national defense mobilization and related military-civilian coordination.¹¹⁸ The provincial department assigned to collaterally serve as IMO is usually the Department of Industry and Information Technology (工业和信息化部)^{119 120 121} Communications support to mobilization activities is managed by the provincial Communications Administration (省通信管理局).¹²²

Economic Mobilization Centers

To rapidly mobilize critical material resources from the commercial sector to support wartime or domestic emergency response operations, Beijing has designated select SOE and commercial business units as Economic Mobilization Centers (EMCs). Most EMCs are designated large and medium-sized SOEs owned by local governments under SASAC oversight. This allows the state to fully leverage the products, personnel, technologies, processes, equipment, and facilities of these enterprises by requiring them to integrate national defense requirements into their business

framework. EMCs provide economic mobilization potential data to NDMCs and the PLA which form the backbone of mobilization potential databases.

EMCs are generally large enterprise groups that manage numerous subsidiaries at one or more locations. EMCs and their subsidiaries manufacture products that meet national defense material requirements, to support either military operations or domestic emergency response activities, and to maintain latent production capacity as well as the excess components, semi-finished products, and standard parts needed for rapidly surge production necessary to support contingency requirements.¹²³ They maintain military-related technical data such as process diagrams in established databases and the information repositories needed to rapidly transition production from commercial to military-use. By registering and maintaining files on enterprise-affiliated technical and professional personnel, EMCs are also leveraged to identify personnel that may be mobilized to support wartime production, logistics, or front-line support activities.¹²⁴

This form of military-civilian fusion allows the government and military to optimize mobilization potential with reduced resource expenditures, and may benefit enterprises through government subsidies, preferential contracts, and endorsement. Further, EMCs enable efficient transfer of civilian high-technology resources, data, and expertise to the military as well as proliferation of military industrial technology into civilian enterprises. EMCs also facilitate collaboration and development of military-civilian dual-use technologies.¹²⁵

An EMC may be designated as a “mobilization center” or “base” under the supervision of provincial, municipal, or city NDMCs that collaborate with local SASAC-affiliated officials through EMOs. For example, in 2009, SOE Taizhou Huaxin Pharmaceutical Investment Co., Ltd. (THPI), a subsidiary of Taizhou SASAC, and in partnership with the Taizhou municipal government and Jiangsu Province, built the Taizhou Medical High-Tech Industrial Development Zone (HTDZ) to serve as a national-pharmaceutical industry hub.^{126 127} The Zone was designated as a National Medical Mobilization Center (NMMC) (泰州国家医药动员中心) by the national EMO.¹²⁸ Several dozen pharmaceutical companies, private enterprises and local SOEs, established production facilities within the Zone and were organized into a mobilization cluster consisting of “1 center, 4 departments, 5 bases, 24 enterprises.”^{129 130} In September 2021, the Taizhou NDMC organized “Taidong-2021,” to stand up the Taizhou Military and Civilian Joint Command and transition the Taizhou NMMC to a wartime state.^{131 132 133} During the exercise, the Taizhou NMMC organized affiliated pharmaceutical companies to deploy drugs and medical supplies to front line units using a business transaction platform developed by Jiangsu Huawei Pharmaceutical Logistics Co., Ltd., a SOE subsidiary of THPI.^{134 135}

Transportation Mobilization System

The 2020 Science of Strategy describes the transportation requirements to support joint logistics support as “meeting the needs of joint operations transportation delivery, relying on the joint logistics support force itself or coordinating other military and local transportation forces, using roads, railways, water transportation, air transportation, pipelines and other means to complete various types in a timely manner.”¹³⁶ For the vast majority of these transportation delivery methods, the PLA relies on its ability to leverage civilian resources.

The NDMC's National Transportation War Readiness Office (TWRO) (国家交通战备办公室) is responsible for drafting guidelines and laws for national defense transportation work, planning defense transportation networks, and formulating defense transportation plans for major military operations and emergencies.¹³⁷ As of early 2022, the office's director, Bai Zhongbin (白忠斌), doubles as the director of the CMC Logistic Support Department (LSD)'s Transportation and Delivery Bureau (中央军委后勤保障部运输投送局).¹³⁸ The National TWRO coordinates with mobilization offices within the Ministry of Transportation and associated government ministries, and also transportation-associated state-owned enterprises. These organizations all have explicit national defense mobilization offices and responsibilities.^{139 140} For example, in 2018 the Civil Aviation Administration of China's Mobilization Office and the National TWRO jointly supervised an emergency rescue drill at the Yinchuan International Airport to practice "dealing with the complex environment of wartime and non-wartime military operations."¹⁴¹ Similarly, the China Classification Society participated in drafting requirements for civil transport ships to be convertible to national defense purposes.^{142 143}

The 2019 Regulations on Civil Mobility National Defense Mobilization¹⁴⁴ and the 2016 National Defense Transportation Law set out the legal division-of-labor for national defense transportation mobilization.¹⁴⁵ Based on operational support requirements, the CMC LSD Transportation and Delivery Bureau in conjunction with the "National People's Economic Mobilization Authority" (presumably the NDMC Economic Mobilization Office) and the Ministry of Transportation collectively produce transportation mobilization requirements and submit them to the NDMC for approval.^{146 147} These organizations also produce technical requirements for the production of civilian vehicles, rules for subsidizing their production, and requirements for vehicle inspection to confirm compliance.¹⁴⁸ The CMC LSD Transportation and Delivery Bureau produces the National Defense Mobilization Plan for Civil Transportation Capacity¹⁴⁹, and corollary plans are produced for each provincial MD and provincial government.¹⁵⁰ According to these plans, the CMC LSD Transportation and Delivery Bureau and the National People's Armed Forces Mobilization Office (国家人民武装动员办公室) pre-requisition civilian transportation capacity to support future mobilization needs.¹⁵¹

Theater and Provincial Transportation Mobilization

Many of the PLA's transportation and delivery operations happen within TCs. These operations are authorized by the TC JOCC. The JOCC directs military service-specific TC Sub-Centers (战区作战分中心) to plan and supervise transportation and delivery operations, that in turn create a transportation Task Force specific to the operation.^{152 153} These Task Forces apply for support from their TC's Joint Logistics Support Center (JLSC) (联勤保障中心) via their supervising TC Sub-Centers.¹⁵⁴ Each TC JLSC has Transportation and Delivery Dispatch Centers (运输投送调度中心), that command Military Representative Offices (MROs) (军代处) assigned to large transportation enterprises such as China Railways.^{155 156} Through these Transportation and Delivery Dispatch Centers, the transportation Task Force can utilize mobilized trains and other types of civil transport that are available to the Joint Logistics Support Force (JLSF).¹⁵⁷

Transport tasks are managed by the TC Sub-Center using both military and civil communications channels to maintain C2.¹⁵⁸ When using civil transport, in practice this means the TC Sub-Centers are often monitoring and controlling transport and delivery Task Forces using information provided by the JLSC Transportation and Delivery Dispatch Center, as well as the relevant provincial TWROs.^{159 160}

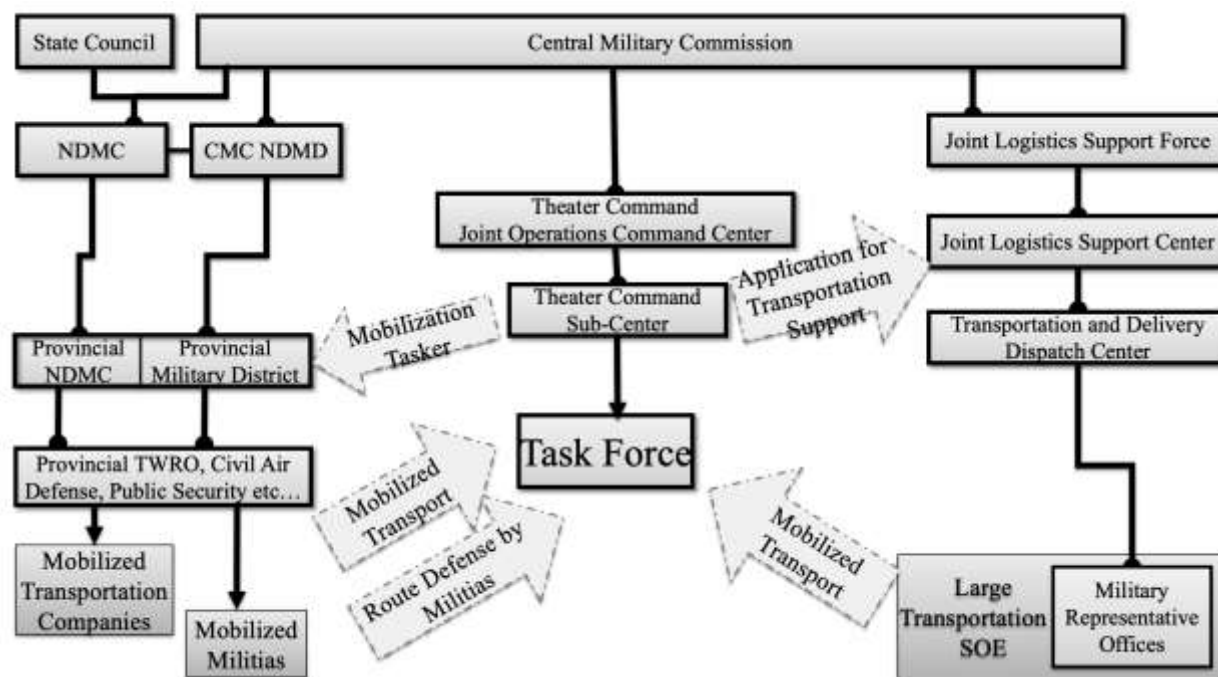


Figure 3: Chain of Command for Theater Transportation Mobilization^{161 162 163 164 165 166}

For example, ground transport Task Forces directed by one of the theaters' Ground Command Sub-Centers will include Theater JLSC MRO officers. The JLSC MRO officers will monitor rail traffic using existing China Railways-operated dispatching and operations networks.^{167 168} Such a Task Force could leverage mobilized militia and reserve units provided by the provincial MDs to guard railways and highways and manage traffic control. Civil Air Defense and construction teams may be dispatched to repair damaged transportation arteries as part of the Task Force.¹⁶⁹

TCs also coordinate transportation and delivery operations with the provincial MDs within their jurisdiction and can requisition support from the provincial NDMCs in these districts. At the provincial level, responsibility for responding to requests from the TCs for transportation support are distributed among the provincial government NDRC, Department of Transportation, Civil Air Defense Office, Military-Civilian Integration Committee, and various other transportation departments.^{170 171}

In his analysis of provincial-level mobilization command, the commander of the Ningxia MD described the creation of special-purpose command organizations to support wartime transportation operations under the joint authority of the provincial Department of Transportation and the MD's Support Bureau Deputy Director. Such a group would include the provincial

NDMC's TWRO, Public Security Bureau, Civil Aviation Safety Supervision Management Bureau (民航安全监督管理局) and the provincial airport management group company, Railway MRO and Railway Bureau Group Company leadership, and the Highway Management Bureau. This group would be specifically responsible for the organization and command of transportation security and would coordinate the matching of requirements coming from the transportation operation Task Force to available resources. Lastly, it would coordinate with county or municipal NDMCs if local transportation or logistics resources are needed to support the transportation operation.¹⁷²

An example of this working in practice can be found in an article describing an JLSF transportation exercise conducted by the Northern TC in 2019. According to the article, the TC's JLSC supplemented its transportation security forces with non-uniformed local security forces provided by municipal Military-Civilian Integration Development Council Offices. (军民融合发展委员会办公室). In this article, the Deputy Director of the Northern TC's Transportation and Delivery Dispatch Center said that the JLSC's MROs have a role in coordination of local resources, presumably working through the Provincial NDMCs and their respective MDs.¹⁷³

Transportation Mobilization Support for the PLA Air Force and Navy

Just as in the case of ground-based transportation and logistics, the PLA Air Force (PLAAF) and PLA Navy (PLAN) utilize mobilized civil transportation resources. For example the PLAAF has a strategic projection support fleet of civil planes that have been mobilized to help organize emergency transportation missions, such as evacuation missions in Libya and Bali.¹⁷⁴ Similarly, the PLA has established relationships with Chinese logistics firms such as SF Express Group (顺丰速运), JD Logistics (京东物流), and Deppon Express (德邦物流).¹⁷⁵ In 2017 SF Express Group signed an agreement with the PLAAF to support transport and logistic missions utilizing cargo aircraft affiliated with its subsidiary SF Airlines.^{176 177}

The PLA has similar agreements with Chinese shipping state owned enterprises. According to discussions in Party-affiliated newspapers, there had historically been a reluctance in the PLA to use maritime shipping, but over the past decade the PLA has regularly utilized civil shipping in emergency operations and military exercises.^{178 179} When using mobilized maritime transport, PLA transportation Task Forces and their supervising TC Sub-Centers use military C4 systems placed on-board mobilized civil vessels as well as civil ship tracking systems (such as AIS) to track and command seaborne transit.¹⁸⁰ That said, PLA authors have publicly identified perceived weaknesses in the PLA's processes for mobilizing civil shipping. For example, PLA academics have argued for China to improve mechanisms for mobilizing state-owned merchant ships, even those with foreign flags-of-convenience, while at the same time building incentives for Chinese-owned shipping to operate under a Chinese flag.¹⁸¹ Similarly, PLA academics have encouraged regularizing the supervision of mobilizable civil shipping, to include specialized training for ships and crews available to the PLA.¹⁸²

Legal Reform and Enduring National Defense Mobilization Constraints

Despite recent military and State Council reforms, PLA academics have argued that China's national defense mobilization system remains hampered by unclear definition of powers and responsibilities for wartime mobilization, inefficient operational support linkages, and insufficient connections between the TC and mobilization offices.¹⁸³ On October 24th 2021, the Standing Committee of the National People's Congress announced that it planned to amend and improve provisions of the National Defense Mobilization Law, the Civil Air Defense Law, the National Defense Transportation Law and the National Defense Education Law.¹⁸⁴ In the weeks following this announcement, the MD party committees of various provinces announced they had held their own meetings to discuss delegated guidance.^{185 186 187}

Short of public release of the updated regulations, the most authoritative insights into the changes to the laws come from interviews of key leadership. For example, according to a recent interview of JLSF Deputy Director Bai Zhongbin, the National Defense Transportation Law was updated in 2021 in the following ways:¹⁸⁸

1. New rules related to national defense transportation planning and strategic delivery, rules related to the conversion from peacetime to wartime, and definitions of the organization and command structure in wartime. Enterprises and institutions operating overseas will provide transportation and strategic delivery support.
2. Improvements to the working mechanisms for “market-oriented policy support” and clarification of “responsibilities and rights, incentives and constraints.” For example, “the increased cost of civil delivery vehicles due to the implementation of national defense requirements shall be borne by the state”.¹⁸⁹
3. Specified funding rules and determination of national defense transportation freight rates. “Expenses incurred by citizens and organizations in completing national defense transportation tasks shall be paid by the user-unit” at a rate not lower than market price.¹⁹⁰

Though the specific amendments planned to the 2021 legal changes relevant to national defense mobilization have not been publicly released as of the writing of this report, discussion of the weaknesses of China's national defense mobilization system are fairly widespread in both Chinese state and PLA media sources. By investigating the mobilization system's perceived weaknesses, it is likely one can predict the direction of future legislative reforms and administrative changes.

Emphasis of Continued National Defense Mobilization Reforms

Chain of Command

One of the few specific goals of the 2021 adjustments to the defense mobilization laws is a review of the “military-local coordination link” (军地协调链路).¹⁹¹ The existing legal framework does not establish a clear chain of command between military leaders and local

authorities. The 2010 National Defense Mobilization Law delegates the “organization, direction and coordination” (组织,指导,协调) of national defense mobilization activities to the MD and NDMCs, but the management (管理) of mobilization work is conducted by the provincial and local governments.¹⁹² According to PLA academics, in practice uncertain chains of command has led to bureaucratic infighting and has inhibited the development of organizational experience.¹⁹³

Uncertainty in the administration of mobilization can be seen in the divergent ways the chain of command for the defense mobilization system is described by PLA and party leadership. For example, according to the commander of the Ningxia MD, the MD and NDMCs set requirements for the government to deliver. However, he then goes on to say that the specific structure of the relationship should be flexible and responsive to the specific mission.¹⁹⁴ In comparison, according to the Secretary of the Gansu Provincial Party Committee, the provincial party committee supervises the mobilization work within the provincial MD that the government is in charge of, with the PLA’s role being largely one of coordination.¹⁹⁵

Economic mobilization in particular, continues to lack institutional mechanisms necessary for efficient large-scale mobilization in crisis. No economic mobilization organization has been established under the CMC or NDMD to manage requirement submissions in a unified manner. The CMC LSD and Equipment Development Department are responsible for organizing logistics mobilization and equipment requirements for the entire military but also lack specialized mobilization organizations, awareness, and control over mobilization requirements levied at various levels. Further, mobilization offices throughout the system consist primarily of personnel working mobilization duties as a collateral assignment, with only a small number of full-time cadres struggling to carry out mobilization tasks in competition with other government priorities.^{196 197}

NDMCs, and DRCs in particular, lack organizational consistency, with a great deal of variance in the offices assigned national defense mobilization responsibilities across the government. This restrains standard mobilization procedures across provinces and TCs. Further, the scope of responsibilities for military commands and government organizations at every level are unclear, as is an understanding of how those responsibilities alter in war or emergencies. This results in both overlaps and gaps in mobilization actions.¹⁹⁸

Economic mobilization is also hindered by a lack of standards for mobilization requirements submissions and collection of national defense mobilization potential. Office responsibilities for the management of this information are not standard among levels of government and across TCs and provinces. The same is true of information systems used to support these activities.^{199 200} Additionally, sources claim that existing military and civilian standards are not compatible. This leads to unrequited expectations by the military regarding the civil-sectors’ ability to support wartime needs.

In an article in PLA Daily in 2020, the director of the Tianjin Garrison District Mobilization Bureau discussed recommended changes to the chain of command within the mobilization system (Autonomous cities like Shanghai Tianjin and Chongqing have Garrison Districts rather than Military Districts, but still directly report to the NDMD). He argued that the mobilization

law should establish clearer definitions of which aspects of the PLA organization or other parts of the State are responsible for identifying requirements for the mobilization system to fill. He also argued that the process for evaluating and enacting mobilization requirements should be clarified at the national level and improved by leveraging the expertise of national institutions in coordination with the NDMC.²⁰¹ Though it is difficult to gauge to what degree the author is giving voice to the “party line” as far as the trends of legal reform are concerned, the Tianjin Garrison District has been lauded for its promulgation of local regulations used to solve contractions in the defense mobilization system by at least one PLA academic.²⁰²

Public Awareness and Legal Enforcement

Arguably the most consistent theme in discussions of perceived weaknesses of the national defense mobilization system is lack of public awareness. PLA and national security academics have discussed this issue at length, as have publications from provincial MDs and municipal MSDs.^{203 204 205 206} Public reports of inspections claim that officials frequently have a poor understanding of the contents of the National Defense Mobilization Law and the associated responsibilities. Even amongst mobilization workers, there are reported uncertainties regarding the extent of the system’s powers compared to its responsibilities.²⁰⁷ In this vein, PLA academics have expressed concerns that the enforcement mechanisms for defense mobilization work are too vague, and occasionally in conflict with existing law enforcement.²⁰⁸

A report from the Changde municipal MD complains that many cadres interpret mobilization rules as applying only to military officials rather than to themselves.²⁰⁹ It is likely for similar reasons that a public report of the Yunnan Provincial MD Party Committee spent a full paragraph emphasizing Provincial Party Chairman Wang Ning’s (王宁) admonition of the committee, emphasizing that it is “a political requirement and a political responsibility for local party committees and governments at all levels to serve national defense and military construction.”²¹⁰ It is unlikely that concern over this perceived lack of commitment to defense mobilization would have been publicized were it not considered a serious issue by national defense mobilization leadership.

Discussions of perceived low public awareness in PLA media sources are frequently followed by requests to expand enforcement capacity.²¹¹ It is likely that the discussion of low public awareness is a cover for widespread avoidance or violation of mobilization requirements. There are many reasons why commercial firms, even state-owned ones, would be reluctant for their firms and resources to be available to the PLA, even with claims in the law that PLA units will pay market price for those resources. To help deal with this, it appears the mobilization system is stepping-up its enforcement activities. In recent years, provincial and local mobilization officials set up “comprehensive law enforcement brigades” (综合执法大队) to help both expand public awareness and clarify cadres legal responsibilities once society is mobilized.^{212 213} These brigades conduct joint military-civilian law enforcement inspections to ensure that relevant work units are complying with mobilization laws.²¹⁴ Moreover, 2019’s “Regulations on Civil Transportation National Defense Mobilization” laid out specific fines and vague criminal penalties for individuals found to violate mobilization regulations related to pre-requisitioned vehicles and related equipment.²¹⁵ Similarly explicit penalties and processes are likely to be

found in regulations and laws related to other parts of the defense mobilization system. Future adjustments to the defense mobilization-associated laws will likely include expanded emphasis on propaganda and political work, and more explicit consequences for non-compliance across the defense mobilization system.

Information Systems to Enhance the Efficiency of National Defense Mobilization

Beijing is focused on enhancing national defense mobilization through the introduction of new information technologies. National defense mobilization offices at varying levels are exploring the use of technologies to dynamically acquire information on the location of mobilization resources and manage its distribution using cloud computing, “smart city” technologies, geospatial information system technologies, mobile digital platforms, and to use big-data analysis platforms to optimize mobilization requirements and assignments. Mobilization offices are also experimenting with methods for ensuring the secure transmission of mobilization plans and requirements from military information systems to government information systems.²¹⁶

Building Total Asset Visibility and Precision Logistics

NDMCs aspire to use information systems to rapidly identify and locate mobilization resources and direct their deployment to support national defense requirements through interconnected and secure military-civilian mobilization command systems.²¹⁷ PLA authors have broadly discussed their perceived need to link the relevant data systems of the many organizations involved in logistics activities supporting PLA operations. Organizations like the Ministry of Transport’s China Transportation & Telecommunication Information Center (CTTIC, 中国交通通信信息中心) have established agreements with the PAP and likely the PLA to provide emergency communications and monitoring information for China’s transportation and logistics systems.²¹⁸ That said, it is unlikely that the PLA has established a holistic nationwide system for mobilizing and dispatching China’s logistic resources. Such a platform would permit JLSCs and TC Sub-Centers to have full visibility into transportation and logistics operations, even those being managed by civil enterprises and government organs.²¹⁹

At the provincial level, Chinese IT firms are adjusting GIS-based surveillance and dispatching systems for national defense mobilization purposes. One such company, the Geovis Technology Co., Ltd. (中科星图股份有限公司), has developed a National Defense Mobilization Platform that is reportedly in use by at least some provincial MDs. This system reportedly displays information related to military personnel mobilization, economic mobilization, civil air defense mobilization, transportation mobilization, and medical and health mobilization.²²⁰ Shanxi Cloud Era Technology Co. Ltd. (山西云时代技术有限公司) reportedly has developed a similar platform, with similar functions that are used in Shanxi.²²¹ Mobilization offices are also working to enhance real-time mobilization command through wired and wireless technologies, use of visualization platforms, and cloud-computing technologies.²²²

National defense mobilization officials also seek to harness smart city technology to identify, mobilize, and dispatch mobilization resources. For example, the PLA has lauded the application

of 5G and smart city systems in Shenzhen for defense mobilization purposes. Shenzhen's smart-city operations centers collect and share national defense mobilization potential data, down to tracking locations of 18 year-olds for recruitment purposes. Similarly, data on party members and retired soldiers is collected and shared for militia formation purposes.²²³

While pilot sites have been established, efforts continue to be constrained by poor mobilization data collection, generally due to offline data collection methods and disparate, stove-piped, non-standard local mobilization potential databases. There is a broad lack of interconnection between military and civilian sectors or interconnection vertically between responsible organizations at each echelon. Supporting information systems and supporting communications networks vary greatly by geographic area and functional sector, hindering data-integration initiatives.²²⁴

In 2017 JD Logistics (京东物流) signed an agreement with the PLA AF to act as a logistics and procurement supply chain management platform. The firm built a logistics information platform for the PLA AF Logistics Department to provide real-time data access for its material provision services to the PLA.²²⁵ This platform is used to coordinate logistics for PLA AF bases across China.²²⁶ Similarly, Deppon Express (德邦物流) began working with China Ordnance Industry Group, China's primary ground-weapons development and production SOE, to update its supply chains and logistics systems.²²⁷ In effect, this agreement gives it a key role in ensuring that munitions and weapons-systems make it from factories to JLSF warehouses.

As in other aspects of governance in China, improvements to transportation mobilization are tested at the provincial level before being rolled out nationwide. Starting in 2013, the Guizhou Provincial TWRO began developing a dispatch command platform for mobilizing civilian-owned trucks. Based on a similar Uber-for-truckers like platform produced by Huochebang Technology Co. Ltd. (货车帮科技有限公司), the Civil Mobility (Freight) Mobilization Resources Information Platform (民用运力(货车)动员资源信息平台) app and its associated data and command center are used by the provincial NDMC TWRO to select and dispatch trucks and drivers for national defense and emergency response tasks, then track their progress along their routes.^{228 229} The app appears to leverage data on trucks from Huochebang's commercial app to maintain a database of over 5 million drivers. Much like other mobilization potential databases, the platform maintains data on vehicle capabilities and on the drivers' political reliability (possibly from their Social Credit Score) and service histories.²³⁰ In 2017 the platform was used to mobilize 4,706 drivers to help respond to an earthquake in Sichuan.²³¹

Following its platform's perceived success in Guizhou, in 2017, the National TWRO contracted Huochebang to build out the program nationally, likely in collaboration with CTTIC.^{232 233} If this expanded Transportation Warfare Readiness Civil Mobility (Truck) Mobilization Potential Real-time C2 Dispatching Platform (交通战备民用运力(货车)动员潜力实时掌控与指挥调度平台) is modeled after Huochebang's existing systems, it is likely hosted on Huochebang's systems using AliCloud Big Data Group (阿里云大数据团).²³⁴ This system has reportedly been used over the past two years to deliver emergency supplies to areas quarantined due to the coronavirus.²³⁵ Huochebang-associated researchers have suggested the system may eventually be

used the national Comprehensive Transportation Big Data Center (综合交通大数据中心) announced in 2019.^{236 237 238}

Harnessing Mobilization Potential Data

A key element of China's mobilization system is its collection of mobilization potential information. Starting with 2007's National Defense Mobilization Potential Statistical Survey Regulations (国防动员潜力统计调查规定), the NDMC, in collaboration with the National Bureau of Statistics, has conducted annual surveys to assess China's mobilization potential. NDMCs at all levels of government are responsible for these surveys.^{239 240 241} However, since 2019, PLA authors have highlighted the need to further reform mobilization potential data collection processes. Data has historically been collected as a neglected collateral duty by cadres using out of date indices and without simple method of data audit.²⁴² These faults have resulted in mobilization potential data collection that is not considered reliable by PLA leadership.²⁴³

According to Sichuan Province NDMC officials, as of 2016 Sichuan Province's national defense mobilization potential data was mainly unstructured data composed of text, images, and report forms and lacked space attribute and location information.^{244 245} The database is two-dimensional, whereby various file types are linked with attribute records through commercial databases. This allows planners to understand the quantity and location of resources available for mobilization but does not enable them to visualize this data for rapid and dynamic planning. To geospatially view and interact with mobilization potential data, planners are working to include geographic information data and thematic data (such as traffic readiness, economic mobilization information, data transmission and exchange, social resource data, armed forces, equipment data). Data integration will be enhanced by implementation of standardized coordinate systems, naming rules, classification codes, and symbols. The data should be managed centrally through decentralized inputs and be compatible with a variety of data formats.²⁴⁶

Pursuant to the goal of improving data sharing and tracking of mobilization potential, calls have been made in PLA publications to establish a National Defense Mobilization Potential Big Data System (国防动员潜力大数据系统). This system would aggregate data from government and SOE databases at national and local levels allowing users access with differing authorities and would push data to PLA joint operations databases to facilitate potential-to-requirement matching.^{247 248}

According to a data engineer working for the NDMD, one of the goals of this system is to simplify the previously error-prone manual data collection process used to aggregate mobilization potential data. According to this engineer, a pilot mobilization potential data system was established in the Anhui in 2018, collecting data from 30 unspecified provincial and national-level data systems. The engineer indicated that incompatible data standards among government agencies could slow the nationwide application of such a system and called for legal reform to enforce compliance with unified mobilization data standards and improved data sharing.²⁴⁹ These calls have been echoed elsewhere in PLA media, and by academics and PLA officers across the mobilization system.^{250 251 252 253}

Leveraging Big Data for Mobilization

Chinese national defense researchers cite the need to examine big data mining and analysis technologies for the analysis of massive amounts of mobilization data and to build a hardware environment and software models for precise processing and analysis to needed to formulate the management of contingency plans. Researchers also cite the need to examine mobile video, satellite positioning, Internet-of-Things sensing technologies, and intelligent open-source analysis and prediction technologies to maintain situational awareness of resources throughout the mobilization process.²⁵⁴ Per an article in Xinhua, data should be aggregated in a central National Defense Big Data Center (国防动员大数据中心), permitting advanced analytics of transnational data sets provided by SOEs and provincial and local governments.²⁵⁵ Since the outset of the Covid-19 epidemic, China has been strengthening its emergency response data analytics capabilities, in part to better support it's zero-covid containment strategy, and in part to expand its capacity for defense mobilization in wartime.²⁵⁶ That said, no evidence was found in the development of this paper that China has deployed a nationwide system for mobilization data aggregation that meets all PLA requirements.

Conclusions

China's national defense mobilization system remains a work-in-progress. In recent years, there have been significant reforms intended to ensure the mobilization system is capable of rapidly providing civil manpower and resources. Legal changes have put greater emphasis on the PLA's ability to dictate requirements to government agencies, SOEs and companies. In parallel, the national defense mobilization system at the provincial and municipal level has grown more experienced at supporting the PLA. Military exercises and emergencies including but not limited to Covid-19, have given much-needed experience to the economic and transportation mobilization organs of the system. And throughout, the system has grown to exploit the capabilities of China's commercial sector to improve the capabilities of its logistics systems.

PLA officers and academics discussing the mobilization system in detail almost uniformly highlighted the system's remaining deficiencies even as they laude its improvements. Though China continues to provide increasingly detailed laws and regulations that provide guidance on the mobilization system, it is not clear that this growing body of rules will successfully standardize and unify the various branches of the mobilization system. PLA authors envision a mobilization switch that can rapidly transition society to a wartime footing without significant hiccups. Massive bureaucracies would nimbly shift to answering to new chains of command. Mobilization C2 systems would provide MD commanders, TCs, and national commanders with full visibility into the PLA's requirements and society's capacity to supply those requirements. Realizing this will require its prioritization by ministries and enterprises currently occupied with responsibilities other than establishing smooth mobilization processes.

In general, China's national defense mobilization system is designed to support national defense mobilization activities within China and along its periphery, including the deployment and sustainment of forces along interior lines of communication. While national defense mobilization legislative reforms will likely include provisions to improve the PRC's ability to mobilize resources internationally to support external PLA operations, integrating those mechanisms with a still-troubled domestically-focused national defense mobilization system will likely experience significant challenges. The pilot programs to build dynamic mobilization information systems demonstrate the PLA's goal of building omniscience into the mobilization system are no less grand than the People's Bank of China's designs for digital-yuan financial omniscience or the Ministry of Public Security's goal of smart-city omniscient urban control. These goals will likely prove difficult to achieve in full, but even imperfect reform may lead to a stronger mobilization capacity to support the PLA.

¹ Ren Min (任民), *The Science of National Defense Mobilization* (国防动员学) (Beijing: Military Science Publishing House, 2008).

² Mao Zedong, "On Protracted War," May 1938, in *Selected Works of Mao Tse-Tung, Volume II* (Beijing: People's Publishing House, 1965)

³ Ren Min (任民), *The Science of National Defense Mobilization* (国防动员学) (Beijing: Military Science Publishing House, 2008).

⁴ Law of the People's Republic of China on National Defense, 26 Dec 2020, <http://www.npc.gov.cn/englishnpc/c23934/202109/567129ffe3144ccb9ff358fed798b9e3.shtml>

⁵ Article 14, Law of the People's Republic of China on National Defense, 26 Dec 2020, <http://www.npc.gov.cn/englishnpc/c23934/202109/567129ffe3144ccb9ff358fed798b9e3.shtml>

⁶ Article 14, Law of the People's Republic of China on National Defense, 26 Dec 2020, <http://www.npc.gov.cn/englishnpc/c23934/202109/567129ffe3144ccb9ff358fed798b9e3.shtml>

⁷ Article 17, Law of the People's Republic of China on National Defense, 26 Dec 2020, <http://www.npc.gov.cn/englishnpc/c23934/202109/567129ffe3144ccb9ff358fed798b9e3.shtml>

⁸ Article 12, "National Defense Mobilization Law of the People's Republic of China," 26 February 2010, accessed at <http://www.chinanews.com.cn/gn/news/2010/02-26/2141912.shtml>

⁹ National Defense Mobilization Law of the People's Republic of China - 2010

¹⁰ Articles 12 and 18, "National Defense Mobilization Law of the People's Republic of China," 26 February 2010, accessed at <http://www.chinanews.com.cn/gn/news/2010/02-26/2141912.shtml>

¹¹ Website for the State Commission for National Defense Mobilization, <http://www.gfdy.gov.cn/>

¹² '盛斌:首任国防动员部部长, 49岁被授少将, 58岁升中将, 现今63岁 [Sheng Bin: First Director of National Defense Mobilization Department, was awarded major general at the age of 49, promoted to lieutenant general at the age of 58, and is now 63 years old]'; sunnews.cc/; 02 Dec 2021; <https://sunnews.cc/military/231312.html> accessed on 06 Jan 2022; (Source ID 123509)

¹³ '军委国防动员部部长盛斌兼任国家国防动员委员会秘书长 [Sheng Bin, Director of the National Defense Mobilization Department of the Central Military Commission, also serves as the Secretary General of the National Defense Mobilization Committee]'; thepaper.cn; 06 Dec 2016; https://www.thepaper.cn/newsDetail_forward_1574780 accessed on 13 Dec 2021; (Source ID 250164)

¹⁴ Hua Hao 华昊; '改革开放以来我国国防动员法规建设的实践与启示 [Practice and Enlightenment of China's National Defense Mobilization Law Construction Since Reform and Opening Up]'; *National Defense (国防)*; (Source ID 489268)

¹⁵ "The Ministry of Natural Resources of the New Seven Ministries and Commissions Shoulders the Heavy Responsibility, 新建七部委 自然资源部担重责," 14 March 2018, *Ta Kung Pao*, accessed at <http://news.takungpao.com/paper/q/2018/0314/3551339.html>

¹⁶ Portions of this website, to include discussions of NDMC activities have been subsequently deleted from the active page. It is unclear if this is the result of changes to the NDMC system or actions to improve information security.

¹⁷ “National Defense Mobilization Committee,” as described on the China National Defense Mobilization Network, the official website of the NDMC, 14 July 2017, accessed via the Wayback Machine at http://www.gfdy.gov.cn/organization/2017-07/14/content_7676149.htm

¹⁸ “China's Central Propaganda Department Takes Over Regulation of All Media,” 21 March 2018, Radio Free Asia, accessed at <https://www.rfa.org/english/news/china/china-propaganda-03212018140841.html>. As of 2017 the NDMC included the State Administration of Press, Publication, Radio, Film, and Television which was realigned to the Central Propaganda Department in 2018 as part of the 2018 State Council institutional reforms.

¹⁹ “The Ministry of Natural Resources of the New Seven Ministries and Commissions Shoulders the Heavy Responsibility, 新建七部委 自然资源部担重责,” 14 March 2018, Ta Kung Pao, accessed at <http://news.takungpao.com/paper/q/2018/0314/3551339.html>

²⁰ China Daily, “New Chapter for Development of Tourism,” 13 May 2018

²¹ Xinhua, “China to Set Up National Health Commission,” 13 March 2018;

²² China Daily, “New Authority Focuses on Emergency Response,” 30 March 2018, accessed at http://english.www.gov.cn/state_council/ministries/2018/03/30/content_281476095337420.htm

²³ China National Defense Mobilization Network, the official website of the NDMC, accessed at http://www.gfdy.gov.cn/battle/node_96929.htm

²⁴ China National Defense Mobilization Network, the official website of the NDMC, accessed at http://www.gfdy.gov.cn/antiaircraft/node_96931.htm

²⁵ China National Defense Mobilization Network, the official website of the NDMC, accessed at http://www.gfdy.gov.cn/transportation/node_96932.htm

²⁶ Ren Min (任民), *The Science of National Defense Mobilization* (国防动员学) (Beijing: Military Science Publishing House, 2008),

²⁷ PLA Military Terminology, p. 40

²⁸ China National Defense Mobilization Network, the official website of the NDMC, accessed at http://www.gfdy.gov.cn/information/node_96933.htm

²⁹ Ren Min (任民), *The Science of National Defense Mobilization* (国防动员学) (Beijing: Military Science Publishing House, 2008),

³⁰ Zhoukou Military Subregion 周口军分区; ‘省军区系统保障作战部队跨区机动问题初探 [A Preliminary Probe into the Cross-regional Mobility of the Provincial Military District System Support Combat Troops]’; National Defense (国防); 01 Feb 2019; (Source ID 113796)

³¹ Xinhuanet (China National Defense Daily), “Do You Know What Defense Obligations Need to be Fulfilled?” December 1, 2016, accessed at http://www.xinhuanet.com/mil/2016-12/01/c_129386313_2.htm

³² Zhang Jialei (张嘉雷), Guofang, “国防动员指挥体系建设初探”[A Preliminary Study of the Building of the National Defense Mobilization Command System], July 1, 2019

³³ Pengpai, December 6 2016, accessed at http://www.thepaper.cn/newsDetail_forward_1574780

³⁴ “全国人防战略理论集训暨京津冀人防指挥协同演练在石家庄举行” [Group Training in National People’s Air Defense Strategic Theory and People’s Air Defense Command Coordination Exercise for Beijing, Tianjin, and Heibei Province Held in Shijiazhuang] June 14 2017, website of the People’s Air Defense Office of Hefei City accessed at <https://www.hfrfb.gov.cn>

³⁵ Hua Hao 华昊; ‘改革开放以来我国国防动员法规建设的实践与启示 [Practice and Enlightenment of China’s National Defense Mobilization Law Construction Since Reform and Opening Up]’; National Defense (国防); (Source ID 489268)

³⁶ China National Defense Mobilization Network, the official website of the NDMC, accessed at http://www.gfdy.gov.cn/battle/node_96929.htm

³⁷ Pengpai, December 6 2016, accessed at http://www.thepaper.cn/newsDetail_forward_1574780

³⁸ China National Defense Mobilization Network, the official website of the NDMC, accessed at http://www.gfdy.gov.cn/antiaircraft/node_96931.htm

- ³⁹ “Administrative Enforcement of National Defense Mobilization of Civil Transport Resources” Vol. 20 No. 8, August 2018 (Journal of Military Transportation University)
- ⁴⁰ “The 24 Functional Agencies of the National Development and Reform Commission Have Changed to 26, What are the Specific Changes” (国家发改委 24 个职能机构变为 26 个，具体有哪些变化), The Paper, 10 April 2019, https://m.thepaper.cn/newsDetail_forward_3276790
- ⁴¹ Website of the China Jinggangshan Revolution Museum, “Chen Jun, Deputy Director of the Political Work Bureau of the National Defense Mobilization Department of the Central Military Commission and deputy director of the National Defense Education Office, Visited our Museum,” (中央军委国防动员部政治工作局副局长、国家国防教育办公室副主任陈军一行来我馆参观) October 22, 2017, accessed at <http://www.jsgsgmbwg.com/newsshow.php?cid%3D19%26id%3D6122>
- ⁴² “Demystifying the Newly Established CMC National Defense Mobilization Department” [揭秘新成立的中央军委国防动员部], China Youth Daily [中国青年报], January 29, 2016, available at http://zqb.cyol.com/html/2016-01/29/nw.D110000zgqnb_20160129_1-06.htm
- ⁴³ Website of the PRC Ministry of Foreign Affairs, <http://eng.chinamil.com.cn/>
- ⁴⁴ Hua Hao 华昊; ‘改革开放以来我国国防动员法规建设的实践与启示 [Practice and Enlightenment of China's National Defense Mobilization Law Construction Since Reform and Opening Up]’; National Defense (国防); (Source ID 489268)
- ⁴⁵ ‘2021 年中央军委国防动员部面向社会公开招考专业技能岗位文职人员公告 [In 2021, the National Defense Mobilization Department of the Central Military Commission announced that it will openly recruit civilian personnel for professional skills positions to the public.]’; <https://81rc.81.cn/>; 18 Sep 2021; https://81rc.81.cn/news/2021-09/18/content_10090513.htm accessed on 25 Jan 2022; (Source ID 772476)
- ⁴⁶ ‘国家国防教育办公室一行参观校史展览 [The National Defense Education Office and his party visited the school history exhibition]’; <https://xsg.tsinghua.edu.cn/>; <https://xsg.tsinghua.edu.cn/info/1002/1917.htm> accessed on 25 Jan 2022; (Source ID 237504)
- ⁴⁷ ‘国务院办公厅 中央军委办公厅关于同意建立 [Letter of the Joint Conference System of the National Recruitment Work]’; <http://www.gov.cn/>; 16 Nov 2020; http://www.gov.cn/zhengce/content/2020-11/16/content_5561866.htm accessed on 23 Jan 2022; (Source ID 804269)
- ⁴⁸ ‘加快构建面向备战打仗的新型征兵体系 [Accelerate the construction of a new conscription system for preparing for war]’; National Defense ; 14 Jun 2019; http://www.mod.gov.cn/jmsd/2019-03/14/content_4837664.htm accessed on 23 Jan 2022; (Source ID 172566)
- ⁴⁹ Kenneth Allen; ‘The Evolution of the PLA’s Enlisted Force: Conscription and Recruitment ’; Jamestown.org China Brief; 14 Jan 2022; <https://jamestown.org/program/the-evolution-of-the-plas-enlisted-force-conscription-and-recruitment-part-one/> accessed on 23 Jan 2022; (Source ID 668426)
- ⁵⁰ ‘军委国防动员部下设民兵预备役局边防局等单位 [The National Defense Mobilization Department of the Central Military Commission consists of the Frontier Defense Bureau of the Militia Reserve Bureau and other units]’; <http://www.xinhuanet.com/>; 13 Apr 2016; http://www.xinhuanet.com/mil/2016-04/13/c_128890214_3.htm accessed on 24 Jan 2022; (Source ID 797666)
- ⁵¹ Gabriel Dominguez; ‘China to centralise command over military reserve forces’; Janes; 29 Jun 2020; <https://www.janes.com/defence-news/news-detail/china-to-centralise-command-over-military-reserve-forces> accessed on 24 Jan 2022; (Source ID 656468)
- ⁵² ‘军委国防动员部下设民兵预备役局边防局等单位 [The National Defense Mobilization Department of the Central Military Commission consists of the Frontier Defense Bureau of the Militia Reserve Bureau and other units]’; <http://www.xinhuanet.com/>; 13 Apr 2016; http://www.xinhuanet.com/mil/2016-04/13/c_128890214_3.htm accessed on 24 Jan 2022; (Source ID 797666)
- ⁵³ ‘军地合力，万里边疆海疆筑起坚不可摧的钢铁防线 [The combined forces of the military and the land build an indestructible steel line of defense in the frontiers and seas of thousands of miles]’; PLA Daily; 14 Oct 2021; https://www.81.cn/dy/2021-10/14/content_10098441.htm accessed on 25 Jan 2022; (Source ID 411445)
- ⁵⁴ ‘从有海无防到强大海防 [From defenseless to strong coastal defense]’; Xinhua; 19 Nov 2018; http://www.xinhuanet.com/politics/2018-11/19/c_1123735233.htm accessed on 25 Jan 2022; (Source ID 738835)

- ⁵⁵ '努力建设强大稳固的现代边海防 [Efforts to build a strong and stable modern border and coastal defense]'; People's Daily; 11 Oct 2021; <http://cpc.people.com.cn/n1/2021/1011/c64387-32249284.html> accessed on 25 Jan 2022; (Source ID 302354)
- ⁵⁶ “结成九曲连环 共铸护民之盾——沿黄九省（区）人民防空协调合作暨高质量发展会议在济南召开” [Forming a series of nine twists and turns to jointly build a shield to protect the people - the civil air defense coordination and cooperation and high-quality development conference along the nine provinces (regions) along the Yellow River was held in Jinan], People's Daily Online, 29 Sept 2021, accessed at <http://sd.people.com.cn/n2/2021/0929/c386785-34938429.html>
- ⁵⁷ ‘中央军委国防动员部人防局局长殷勇同时担任国家人防办主任’ [Yin Yong, director of the Civil Defense Bureau of the National Defense Mobilization Department of the Central Military Commission, also serves as the director of the National Civil Defense Office], 9 August 2016, accessed at https://www.sohu.com/a/109782567_260616
- ⁵⁸ “Civil Air Defense Law of the People's Republic of China,” 1 Jan1997
- ⁵⁹ '战区联合作战国防动员需求问题研究 [Research on National Defense Mobilization Requirements for Joint Operations in Theaters]'; National Defense ; 01 Aug 2019; An article written in a PLA journal by a staff officer in the Northern Theater's Defense Mobilization Bureau.(Source ID 510861)
- ⁶⁰ 'National Defense Mobilization Law of the People's Republic of China [Effective]'; [http://www.lawinfochina.com](http://www.lawinfochina.com;); <http://www.lawinfochina.com/display.aspx?lib=law&id=8041&CGid=> accessed on 06 Jan 2022; (Source ID 543159)
- ⁶¹ Chen Wengang and Hou Biao 陈文刚 and 侯彪; “Preliminary Study of How to Build Provincial-level Defense Mobilization Command Organs” ‘省域国防动员指挥机构建设初探’; National Defense (国防); 1 Jul 2019
- ⁶² Zheng Weibo 郑威波; ‘探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]’; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ⁶³ Chen Wengang and Hou Biao 陈文刚 and 侯彪; “Preliminary Study of How to Build Provincial-level Defense Mobilization Command Organs” ‘省域国防动员指挥机构建设初探’; National Defense (国防); 1 Jul 2019
- ⁶⁴ Zheng Weibo 郑威波; ‘探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]’; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ⁶⁵ Nanfang Daily 南方日报; “Promote the High-Quality Development of the Party's Management of the Armed Forces and National Defense Mobilization in Guangdong Province” ‘推动广东省党管武装和国防动员工作高质量发展’; 16 December 2021, accessed at <http://gd.people.com.cn/n2/2021/1216/c123932-35053605.html>
- ⁶⁶ Zheng Weibo 郑威波; “Exploring Construction of Provincial-Level National Defense Mobilization Command Organs That Integrate Into the Joint Operational Command System” ‘探索构建融入联合作战指挥体系的省级国防动员指挥机构’; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ⁶⁷ Zheng Weibo 郑威波; “Exploring Construction of Provincial-Level National Defense Mobilization Command Organs That Integrate Into the Joint Operational Command System” ‘探索构建融入联合作战指挥体系的省级国防动员指挥机构’; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ⁶⁸ Zheng Weibo 郑威波; “Exploring Construction of Provincial-Level National Defense Mobilization Command Organs That Integrate Into the Joint Operational Command System” ‘探索构建融入联合作战指挥体系的省级国防动员指挥机构’; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ⁶⁹ Nanfang Daily 南方日报; “Promote the High-Quality Development of the Party's Management of the Armed Forces and National Defense Mobilization in Guangdong Province” ‘推动广东省党管武装和国防动员工作高质量发展’; 16 December 2021, accessed at <http://gd.people.com.cn/n2/2021/1216/c123932-35053605.html>
- ⁷⁰ Yang Yong, Chen Gong, and Lu Bobo (杨勇 陈功 and 路波波), "'Red-vs.-Blue Confrontations' Provide Lots of Takeaways -- Account of Comprehensive National Defense Mobilization Drill in Yinchuan City, Ningxia" ‘一场收获颇多的“红蓝对抗”——宁夏银川市开展国防动员综合演练见闻’; Beijing Zhongguo Guofang Bao; 5 Nov 2021; accessed at <http://www.81.cn/>

- ⁷¹ Article 18, Law of the People's Republic of China on National Defense, 26 Dec 2020, <http://www.npc.gov.cn/englishnpc/c23934/202109/567129ffe3144ccb9ff358fed798b9e3.shtml>
- ⁷² Hao Weijie 郝维杰 biography, website of the Hubei Provincial Civil Air Defense Office accessed at http://rfb.hubei.gov.cn/fbjd/xxgkml/jgzn/ldxx/hwj/202006/t20200602_2375801.shtml on February 21 2022.
- ⁷³ Ta Kung Pao 大公报, "The 4 General Departments of Military Districts Transformed into '1 Office 4 Bureaus' (四總部省軍區改"一辦四局)", 26 Jul 2017, accessed at <http://www.takungpao.com>.
- ⁷⁴ Lin Ying-yu 林穎佑, "PLA Navy Transfers Not About Infighting," May 23 2019, Taipei Times, accessed at <http://www.taipeitimes.com>.
- ⁷⁵ Zheng Weibo 郑威波; "'Exploring Construction of Provincial-Level National Defense Mobilization Command Organs That Integrate Into the Joint Operational Command System" '探索构建融入联合作战指挥体系的省级国防动员指挥机构,' National Defense (国防); 01 Jul 2018; (Source ID 470002).
- ⁷⁶ Beijing Zhongguo Guofang Bao, "Gansu Military District Focuses on Improving Mobilization, Combat Preparation" '甘肃省军地聚焦提升动员备战效能推动后备力量转型发展纪事,' 5 Jan 2022, accessed at <http://www.81.cn>
- ⁷⁷ Ta Kung Pao 大公报, "The 4 General Departments of Military Districts Transformed into '1 Office 4 Bureaus' (四總部省軍區改"一辦四局)", 26 Jul 2017, accessed at <http://www.takungpao.com>.
- ⁷⁸ Zheng Weibo 郑威波; "'Exploring Construction of Provincial-Level National Defense Mobilization Command Organs That Integrate Into the Joint Operational Command System" '探索构建融入联合作战指挥体系的省级国防动员指挥机构,' National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ⁷⁹ Ta Kung Pao 大公报, "The 4 General Departments of Military Districts Transformed into '1 Office 4 Bureaus' (四總部省軍區改"一辦四局)", 26 Jul 2017, accessed at <http://www.takungpao.com>.
- ⁸⁰ Beijing Zhongguo Guofang Bao, "Gansu Military District Focuses on Improving Mobilization, Combat Preparation" '甘肃省军地聚焦提升动员备战效能推动后备力量转型发展纪事,' 5 Jan 2022, accessed at <http://www.81.cn>
- ⁸¹ Dennis J. Blasko, "The Chinese Army Today: Tradition and Transformation for the 21st Century," Routledge, 2012, p. 40-41.
- ⁸² Zheng Weibo 郑威波; '探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]'; National Defense (国防); 01 Jul 2018; (Source ID 470002) Diagram edited to provide more detail about organizations described generally.
- ⁸³ Ren Min (任民), *The Science of National Defense Mobilization* (国防动员学) (Beijing: Military Science Publishing House, 2008),
- ⁸⁴ "Functional Configuration and Internal Organizations," Website of the National Development and Reform Commission, 13 June 2019, accessed at <https://www.ndrc.gov.cn/fzggw/bnpz/?code=&state=123>
- ⁸⁵ "The 24 Functional Agencies of the National Development and Reform Commission Have Changed to 26, What are the Specific Changes" (国家发改委 24 个职能机构变为 26 个, 具体有哪些变化), The Paper, 10 April 2019, https://m.thepaper.cn/newsDetail_forward_3276790
- ⁸⁶ "Research on the Deepening Path of the National Economic Mobilization Mechanism" (国民经济动员机制的深化路径研究), 2 April 2015, Ministry of Industry and Information, accessed at <https://www.21ks.net/lunwen/guominjingjilunwen/29726.html>
- ⁸⁷ NDRC Leadership biographies, Website of the National Development and Reform Commission accessed at <https://www.ndrc.gov.cn/fzggw/wld>
- ⁸⁸ "The party committee of the agency appointed Comrade Liu Ming as the secretary of the party branch of the Department of Economic and National Defense Coordinated Development" 机关党委任命刘明同志为经济与国防协调发展司党支部书记, Website of the National Development and Reform Commission, 30 November 2020, accessed at https://www.ndrc.gov.cn/fzggw/jgsj/jgdw/sjtdt/202011/t20201130_1251637.html
- ⁸⁹ "The Party Committee of the Organ Approved the Results of the Election of the Party Branch Committee of the Department of Coordinated Development of Economy and National Defense," 机关党委批复经济与国防协调发展

司党支部委员会换届选举结果, 11 February, 2021, website of the National Development and Reform Commission accessed at https://www.ndrc.gov.cn/fzggw/jgsj/jgdw/sjdt/202111/t20211102_1302791.html

⁹⁰ "Research on the Deepening Path of the National Economic Mobilization Mechanism" (国民经济动员机制的深化路径研究), 2 April 2015, Ministry of Industry and Information, accessed at <https://www.21ks.net/lunwen/guominjingjilunwen/29726.html>

⁹¹ East China Sea Research Station (东海研究站) zhou ping, deputy director of the department of coordinated development of economy and national defense of the national development and reform commission, visited donghai station to investigate (国家发改委经济与国防协调发展司副司长周平莅临东海站调研), 6 June 2016, website of the Institute of Acoustics, Chinese Academy of Sciences accessed at http://www.ioa.cas.cn/xwzx/zhxw/201606/t20160606_4617321.html

⁹² Jia Yong (贾勇), Work on Solidifying of National Defense Mobilization Building—Conversation With Military People's Congress Representative Wu Yongliang on Mobilization Potential Statistical Survey (夯实国防动员建设的基础工程), 8 Mar 2019, Jiefangjun Bao, accessed at <http://www.chinamil.com.cn/>

⁹³ China Finance Magazine (中国财政杂志社), National Defense Financial Management Work (国防财务管理工作), 6 Aug 2020 accessed at https://www.zgcznet.com/cjqk/zgkjnj/gjcwkgjglgz/202009/20200915/j_2020091523562000015966845646698088.html

⁹⁴ Pan Di (潘娣), Building an Indestructible Steel Defensive Line – Joint Military-Civilian Promotion of Border, Coastal Defense Infrastructure Building (筑起坚不可摧的钢铁防线——军地共话合力推进边海防基础设施建), 13 Oct 2021, PLA Daily Beijing Jiefangjun Bao, <http://www.81.cn>

⁹⁵ notice of the beiliu municipal people's government on the division of labor of the municipal government leaders 北流市人民政府关于市政府领导工作分工的通知, 17 Aug 2021, website of the beiliu municipal people's government office accessed at <http://www.beiliu.gov.cn/xxgk/zfxxgk/xxgkml/wjzl/zfwj/t9830193.shtml>

⁹⁶ Website of the anhui provincial development and reform commission accessed at <http://fzggw.ah.gov.cn/jgsz/jgcs/ghc/index.html>

⁹⁷ Zhu Erjian 祝尔坚 "Innovations in Military Joint Logistics Support Model Based on Cloud Platform and Civil-Military Integration" (基于云平台和军民融合的军队联勤保障模式创新), 11 Aug 2020, Weixin - Shanghaihaishi Junmin Ronghe Fazhan Yanjiuhui

⁹⁸ Hou Zhonghou, Hu Yue, "A study of the Reporting Mechanisms for Submitting National Economic Mobilization Demands" 20 Oct 2019, Zhongguo Junshi Kexue,

⁹⁹ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)

¹⁰⁰ Shi Chunmin Dong Jianmin (石纯民 董建敏), Providing highly effective information support for war (为战争提供高效信息保障), 29 Sep 2021, Zhongguo Guofang Bao China National Defense Newspaper

¹⁰¹ Ren Min (任民), *The Science of National Defense Mobilization* (国防动员学) (Beijing: Military Science Publishing House, 2008).

¹⁰² '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)

¹⁰³ Website of the State-owned Assets Supervision and Administration Commission of the State Council accessed at http://en.sasac.gov.cn/2018/07/17/c_7.htm

¹⁰⁴ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)

¹⁰⁵ Website of the State-owned Assets Supervision and Administration Commission of the State Council accessed at http://en.sasac.gov.cn/2018/07/17/c_7.htm

¹⁰⁶ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)

¹⁰⁷ Website of the Beijing Institute of Technology, School of Management and Economics, 25 June 2018 accessed at <https://sme.bit.edu.cn/>

-
- ¹⁰⁸ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)
- ¹⁰⁹ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)
- ¹¹⁰ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)
- ¹¹¹ Implementation plan for improving the functional classification assessment of central enterprises, 关于完善中央企业功能分类考核的实施方案, 16 August 2021, website of the State-owned Assets Supervision and Administration Commission, accessed at <http://www.sasac.gov.cn/n2588035/n2588320/n2588335/c20234428/content.html> (Originally published as SOSAC Comprehensive 国资发综合 (2016) 252 号)
- ¹¹² '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)
- ¹¹³ Ministry of Industry and Information Technology Organizational Chart, 2014, website of the US-China Business Council accessed at https://www.uschina.org/sites/default/files/2020.09.30_miit_organization_chart.pdf
- ¹¹⁴ '央企国民经济动员体系建设研究 [Research on the Construction of National Economic Mobilization System of Central Enterprises]'; Journal of Beijing Institute of Technology; 01 Sep 2021; (Source ID 169589)
- ¹¹⁵ "Operational Monitoring and Coordination Bureau," Website of the Ministry of Industry and Information Technology, 23 March 2021, accessed at https://www.miit.gov.cn/jgsj/yxj/jgzz/art/2020/art_28be63712322426788b6e1b519a6dc60.html
- ¹¹⁶ ministry of industry and information technology of the people's republic (中华人民共和国工业和信息化部), 22 Feb 2020 accessed at <http://www.k4china.com/article-32-95730-0.html>
- ¹¹⁷ jiangxi provincial measures for national defense information mobilization (promulgated by order no. 149 of the people's government of jiangxi province on august 18, 2006 and amended by order no. 227 of the people's government of jiangxi province on december 4, 2017)
- ¹¹⁸ jiangxi provincial measures for national defense information mobilization (江西省国防信息动员办法) (promulgated by order no. 149 of the people's government of Decembe province on august 18, 2006 and amended by order no. 227 of the people's government of Decembe province on December 4, 2017, website of general office of the people's government of jiangxi province accessed at http://www.jiangxi.gov.cn/art/2021/12/6/art_64505_3776618.html
- ¹¹⁹ information industry office of the provincial national defense mobilization committee 省国防动员委员会信息产业办公室, 19 Oct 2019, website of hubei provincial department of economy and information technology accessed at http://jxt.hubei.gov.cn/fbjd/xxgkml/jgzn/nsjg/sgfdywyhxxcybgs/gzzz/201912/t20191231_1822548.shtml
- ¹²⁰ jiangxi provincial measures for national defense information mobilization (江西省国防信息动员办法) (promulgated by order no. 149 of the people's government of Decembe province on august 18, 2006 and amended by order no. 227 of the people's government of Decembe province on December 4, 2017, website of general office of the people's government of jiangxi province accessed at http://www.jiangxi.gov.cn/art/2021/12/6/art_64505_3776618.html
- ¹²¹ Information and software services division (information mobilization office of the provincial national defense mobilization commission) 信息化和软件服务业处 (省国防动员委员会信息动员办公室), 14 May 2019, website of Department of Industry and Information Technology of Hunan Province accessed at https://gxt.hunan.gov.cn/gxt/xxgk_71033/jgzn/nsjg/201905/t20190514_2762333.html
- ¹²² the 2021 guizhou provincial national defense information mobilization and emergency communication support drill was successfully concluded (2021 年贵州省国防信息动员暨应急通信保障演练圆满闭幕), 10 May 2021, website of the Guizhou Communications Administration accessed at https://gzca.miit.gov.cn/xwdt/gzdt/art/2021/art_08983c82a1c5453bbdf4e592610656c9.html
- ¹²³ Zhang Xiao, "The Ten Basic Functions of the National Economic Mobilization Center" 20 March 2004 (Need help filling in the rest of the sourcing); Zhao Xingchang, "Cultivation of National Economic Mobilization Center," 20 Jul 2007

-
- ¹²⁴ Zhang Xiao, “The Ten Basic Functions of the National Economic Mobilization Center” 20 March 2004 (Need help filling in the rest of the sourcing)
- ¹²⁵ Zhang Xiao, “The Ten Basic Functions of the National Economic Mobilization Center” 20 March 2004 (Need help filling in the rest of the sourcing); Zhao Xingchang, “Cultivation of National Economic Mobilization Center,” 20 Jul 2007
- ¹²⁶ Lianhe Ratings Global, Taizhou Huaxin Pharmaceutical Investment Co., Ltd. Ratings Report, 30 Sept 2021, accessed at https://lhratingsglobal.com/wp-content/uploads/bsk-pdf-manager/2021/09/Rating-Report_THPI-20210930.pdf
- ¹²⁷ Fitch Ratings, Taizhou Huaxin Pharmaceutical Investment Co., Ltd. Rating Report, 5 Feb 2021 accessed at <https://www.fitchratings.com/research/international-public-finance/taizhou-huaxin-pharmaceutical-investment-co-ltd-05-02-2021>
- ¹²⁸ Shan Youkang (单友康) taizhou city, jiangsu province, carried out a drill to transfer and expand the production of the medical mobilization center (江苏省泰州市开展医药动员中心转扩产演练), 15 Oct 2021, China National Defense News (中国国防报), accessed at http://www.mod.gov.cn/mobilization/2021-10/15/content_4896913.htm
- ¹²⁹ Shan Youkang (单友康) taizhou city, jiangsu province, carried out a drill to transfer and expand the production of the medical mobilization center (江苏省泰州市开展医药动员中心转扩产演练), 15 Oct 2021, China National Defense News (中国国防报), accessed at http://www.mod.gov.cn/mobilization/2021-10/15/content_4896913.htm
- ¹³⁰ Jiangsu Huawei Pharmaceutical Logistics Co., Ltd. (江苏华为医药物流有限公司) company profile, Website of Taizhou Talent Network, accessed at https://www.tzjob.com/html/company_25637.html
- ¹³¹ “Taizhou Municipal Civil Air Defense Office fully guarantees the “Taidong-2021” drill activit,” 泰州市人防办全力保障“泰动-2021”演练活动, 30 September 2021, website of the Jiangsu Civil Air Defense Office accessed at http://mf.jiangsu.gov.cn/art/2021/9/30/art_64_10033573.html
- ¹³² Xu Youyang (徐佑阳) ed, “The Standing Committee of the Municipal Party Committee organized the Taizhou National Pharmaceutical Mobilization Center's conversion and expansion drill,” 市委常委会组织开展泰州国家医药动员中心转扩产演练活动, Fengcheng Taizhou Network, 27 September 2021 accessed at <http://www.mytaizhou.net/folder114/folder44/folder51/2021-09-27/517426.html>
- ¹³³ “Taizhou Municipal Civil Air Defense Office fully guarantees the “Taidong-2021” drill activit,” 泰州市人防办全力保障“泰动-2021”演练活动, 30 September 2021, website of the Jiangsu Civil Air Defense Office accessed at http://mf.jiangsu.gov.cn/art/2021/9/30/art_64_10033573.html
- ¹³⁴ Xu Youyang (徐佑阳) ed, “The Standing Committee of the Municipal Party Committee organized the Taizhou National Pharmaceutical Mobilization Center's conversion and expansion drill,” 市委常委会组织开展泰州国家医药动员中心转扩产演练活动, Fengcheng Taizhou Network, 27 September 2021 accessed at <http://www.mytaizhou.net/folder114/folder44/folder51/2021-09-27/517426.html>
- ¹³⁵ Jiangsu Huawei Pharmaceutical Logistics Co., Ltd. (江苏华为医药物流有限公司) company profile, Website of Taizhou Talent Network, accessed at https://www.tzjob.com/html/company_25637.html
- ¹³⁶ ‘战略学 [Science of Strategy]’; Pg. 426; National Defense University Press; 01 Aug 2020; (Source ID 896905)
- ¹³⁷ ‘National Transportation Mobilization Office’; GFDY.Gov.Cn via Baidu Baike; 20 Jul 2012; https://baike.baidu.com/reference/2473511/80c4_tPWj72d1FVbMF2uwVGqI_b0z-DJUN3ZAL02eC9ihde30uZQNYbJZPMXmJEpV98Gv2cB5HZA1z3AAWGxvAgLalJqDvoJaqAOTglnRlrK7mrQA accessed on 09 Jan 2022; (Source ID 854482)
- ¹³⁸ ‘关于《国防交通法》，这些你应该知道 [What you should know about the National Defense Traffic Act]’; sohu.cn; 01 Oct 2021; https://www.sohu.com/a/493110248_121106991 accessed on 09 Jan 2022; (Source ID 527101)
- ¹³⁹ ‘Organization Responsibilities’; CAAC.cn; <http://www.caac.gov.cn/dev/yshs/> accessed on 15 Jan 2022; (Source ID 102169)
- ¹⁴⁰ ‘3rd annual newspaper of COSCO Shipping.’; <https://sh.coscoshipping.com>; 18 Feb 2019; <https://sh.coscoshipping.com/attach/0/2f8c45031fe5499983d98a848cc8a1a7.pdf> accessed on 15 Jan 2022; (Source ID 841068)

¹⁴¹ '银川机场圆满完成国防交通专业队伍应急救援综合演练 [Yinchuan Airport successfully completed the comprehensive emergency rescue drill of the national defense transportation professional team]'; CAAC.cn; 28 Aug 2018;

http://www.caac.gov.cn/PHONE/GLJ_PHONE/XBGLJ/XB_XXGK/XB_GZDT/201808/t20180828_191451.html accessed on 15 Jan 2022; (Source ID 140493)

¹⁴² China Classification Society (CCS) (中國船級社) is a classification society of ships, started in 1956 as a non-profit making body in the PRC to perform classification survey, certification survey and notarial survey of ships including offshore installations, containers and related industrial products both at home and abroad. CCS also conducts statutory work on behalf of the PRC Government and other flag administrations.

¹⁴³ '新造民船国防技术标准颁布: 战时可迅速转为军用 [The national defense technical standards for new civil ships are promulgated: they can be quickly converted to military use in wartime]'; <http://www.ctcns.net>; 16 Jun 2015; <http://www.ctcns.net/index.php?a=shows&catid=35&id=4523> accessed on 15 Jan 2022; (Source ID 982652)

¹⁴⁴ '民用运力国防动员条例 [Regulations on Civil Mobility National Defense Mobilization]'; gov.cn; 02 Mar 2019; http://www.gov.cn/gongbao/content/2019/content_5468879.htm accessed on 14 Jan 2022; (Source ID 724362)

¹⁴⁵ 'National Defense Transportation Law'; <http://www.xinhuanet.com/>; 03 Sep 2016;

http://www.xinhuanet.com/politics/2016-09/03/c_1119506255.htm accessed on 20 Jan 2022; (Source ID 934621)

¹⁴⁶ "National Defense Transportation Management Authority" (国家国防交通主管机构) is the CMC LSD according to '民用运力国防动员行政执法研究 [Administrative Enforcement in National Defense Mobilization of Civil Transportation Resources]'; Journal of Military Transportation University; 01 Aug 2018; (Source ID 922401)

¹⁴⁷ "国家国民经济动员机构"

¹⁴⁸ '民用运力国防动员条例 [Regulations on Civil Mobility National Defense Mobilization]'; gov.cn; 02 Mar 2019; http://www.gov.cn/gongbao/content/2019/content_5468879.htm accessed on 14 Jan 2022; (Source ID 724362)

¹⁴⁹ Again, with the collaboration of all of the above organizations and with the approval of the NDMC.

¹⁵⁰ '民用运力国防动员条例 [Regulations on Civil Mobility National Defense Mobilization]'; gov.cn; 02 Mar 2019; http://www.gov.cn/gongbao/content/2019/content_5468879.htm accessed on 14 Jan 2022; (Source ID 724362)

¹⁵¹ '民用运力国防动员条例 [Regulations on Civil Mobility National Defense Mobilization]'; gov.cn; 02 Mar 2019; http://www.gov.cn/gongbao/content/2019/content_5468879.htm accessed on 14 Jan 2022; (Source ID 724362)

¹⁵² Sun Hao 孙浩, Li Lianbang 李联邦, Li Peng 李鹏; '战区主战体制下联合投任务式指挥研究 [Research on joint mission command under the main battle system of the theater]'; Journal of Military Transportation University; 01 Nov 2018; (Source ID 276519)

¹⁵³ Wang Jianjun 王建军, Cao Zhan 曹站和 and Zhu Ning 朱宁; '后装保障指挥“变”在哪里 [Where is the "change" in the rear equipment support command?]; PLA Daily; 21 Mar 2019; http://www.81.cn/jfjbmap/content/2019-03/21/content_229733.htm accessed on 05 Feb 2022; (Source ID 923806)

¹⁵⁴ '联勤保障部队探索建立新型军事运输投送机制 [Joint logistics support force explores the establishment of a new type of military transport and delivery mechanism]'; people.gov.cn; 31 Dec 2019; <http://military.people.com.cn/n1/2019/1231/c1011-31529984.html> accessed on 15 Feb 2022; (Source ID 828187)

¹⁵⁵ Xiao Bing 肖兵 Huang Yi 黄翊; '某军事运输投送调度中心借助地方力量提高保障能力 [A military transportation and delivery dispatch center improves its support capability with the help of local forces]'; MOD.gov.cn; 21 Jan 2019; http://www.mod.gov.cn/mobilization/2019-01/21/content_4834944.htm accessed on 15 Feb 2022; (Source ID 195392)

¹⁵⁶ '军媒曝各地军代处已转隶联勤保障中心 详情公开 [Military media revealed that the military representative offices in various places have been transferred to the Joint Logistics Support Center, the details are open]'; Sohu.com; 10 Oct 2016; <https://m.sohu.com/n/470524646/> accessed on 15 Feb 2022; (Source ID 803582)

¹⁵⁷ Wang Jianjun 王建军, Cao Zhan 曹站和 and Zhu Ning 朱宁; '后装保障指挥“变”在哪里 [Where is the "change" in the rear equipment support command?]; PLA Daily; 21 Mar 2019; http://www.81.cn/jfjbmap/content/2019-03/21/content_229733.htm accessed on 05 Feb 2022; (Source ID 923806)

- ¹⁵⁸ Sun Hao 孙浩, Li Lianbang 李联邦, Li Peng 李鹏; '战区主战体制下联合投任务式指挥研究 [Research on joint mission command under the main battle system of the theater]'; Journal of Military Transportation University; 01 Nov 2018; (Source ID 276519)
- ¹⁵⁹ Zhoukou Military Subregion 周口军分区; '省军区系统保障作战部队跨区机动问题初探 [A Preliminary Probe into the Cross-regional Mobility of the Provincial Military District System Support Combat Troops]'; National Defense (国防); 01 Feb 2019; (Source ID 113796)
- ¹⁶⁰ Yun Junde 云俊德; '军地联合保障通道这样开启 [The military-civilian joint support channel is opened]'; MOD.gov.cn; 01 Feb 2019; http://www.mod.gov.cn/mobilization/2019-02/01/content_4835603.htm accessed on 15 Feb 2022; (Source ID 312628)
- ¹⁶¹ Sun Hao 孙浩, Li Lianbang 李联邦, Li Peng 李鹏; '战区主战体制下联合投任务式指挥研究 [Research on joint mission command under the main battle system of the theater]'; Journal of Military Transportation University; 01 Nov 2018; (Source ID 276519)
- ¹⁶² Wang Jianjun 王建军, Cao Zhan 曹站和 and Zhu Ning 朱宁; '后装保障指挥“变”在哪里 [Where is the "change" in the rear equipment support command?]; PLA Daily; 21 Mar 2019; http://www.81.cn/jfjbmap/content/2019-03/21/content_229733.htm accessed on 05 Feb 2022; (Source ID 923806)
- ¹⁶³ Zhoukou Military Subregion 周口军分区; '省军区系统保障作战部队跨区机动问题初探 [A Preliminary Probe into the Cross-regional Mobility of the Provincial Military District System Support Combat Troops]'; National Defense (国防); 01 Feb 2019; (Source ID 113796)
- ¹⁶⁴ Yun Junde 云俊德; '军地联合保障通道这样开启 [The military-civilian joint support channel is opened]'; MOD.gov.cn; 01 Feb 2019; http://www.mod.gov.cn/mobilization/2019-02/01/content_4835603.htm accessed on 15 Feb 2022; (Source ID 312628)
- ¹⁶⁵ Zheng Weibo 郑威波; '探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]'; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ¹⁶⁶ Li Jiayu 李佳雨 Jiang Chenyang 蒋晨阳 Hu Yuxiang 胡宇翔; '为部队打胜仗提供“套餐式”保障 [Provide "package type" guarantee for troops to win battles]'; Legal Daily; 21 Jan 2022; http://www.legaldaily.com.cn/army/content/2022-01/21/content_8663022.htm accessed on 30 Jan 2022; (Source ID 389879)
- ¹⁶⁷ Yun Junde 云俊德; '军地联合保障通道这样开启 [The military-civilian joint support channel is opened]'; MOD.gov.cn; 01 Feb 2019; http://www.mod.gov.cn/mobilization/2019-02/01/content_4835603.htm accessed on 15 Feb 2022; (Source ID 312628)
- ¹⁶⁸ Sun Hao 孙浩, Li Lianbang 李联邦, Li Peng 李鹏; '战区主战体制下联合投任务式指挥研究 [Research on joint mission command under the main battle system of the theater]'; Journal of Military Transportation University; 01 Nov 2018; (Source ID 276519)
- ¹⁶⁹ Zhoukou Military Subregion 周口军分区; '省军区系统保障作战部队跨区机动问题初探 [A Preliminary Probe into the Cross-regional Mobility of the Provincial Military District System Support Combat Troops]'; National Defense (国防); 01 Feb 2019; (Source ID 113796)
- ¹⁷⁰ '民用运力国防动员行政执法研究 [Administrative Enforcement in National Defense Mobilization of Civil Transportation Resources]'; Journal of Military Transportation University; 01 Aug 2018; (Source ID 922401)
- ¹⁷¹ Li Jiayu 李佳雨 Jiang Chenyang 蒋晨阳 Hu Yuxiang 胡宇翔; '为部队打胜仗提供“套餐式”保障 [Provide "package type" guarantee for troops to win battles]'; Legal Daily; 21 Jan 2022; http://www.legaldaily.com.cn/army/content/2022-01/21/content_8663022.htm accessed on 30 Jan 2022; (Source ID 389879)
- ¹⁷² Zheng Weibo 郑威波; '探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]'; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ¹⁷³ Yun Junde 云俊德; '军地联合保障通道这样开启 [The military-civilian joint support channel is opened]'; MOD.gov.cn; 01 Feb 2019; http://www.mod.gov.cn/mobilization/2019-02/01/content_4835603.htm accessed on 15 Feb 2022; (Source ID 312628)

- ¹⁷⁴ '依托战略投送支援机队实施海外航空战略投送 [Overseas Aviation Strategic Projection Using a Strategic Projection Support Fleet]'; Journal of Military Transportation University ; 01 Apr 2018; (Source ID 224685)
- ¹⁷⁵ Guo Yajun 郭亚军, Shi Fangdan 史方丹, Wei Yaocong 魏耀聪; '战时地方物流资源动员面临的问题及对策 [Problems and countermeasures faced by local logistics resource mobilization in wartime]'; Journal of Military Transportation University ; 01 Nov 2018; (Source ID 628191)
- ¹⁷⁶ He Hongyuan 贺泓源; '京东、顺丰与空军后勤部达成战略合作 布局军民融合 [JD.com, SF Express and the Air Force Logistics Department reach strategic cooperation to deploy military-civilian integration]'; The Economic Observer; 25 Oct 2017; <https://www.eeo.com.cn/2017/1025/315365.shtml> accessed on 08 Feb 2022; (Source ID 208336)
- ¹⁷⁷ Website of SF Airlines accessed at http://www.sf-airlines.com/sfa/zh/article_44.html
- ¹⁷⁸ '如何让民用船舶助力军事运输? [How to make civilian ships assist military transportation?]; People's Daily; 24 May 2019; <http://military.people.com.cn/BIG5/n1/2019/0524/c1011-31101519.html> accessed on 16 Feb 2022; (Source ID 915038)
- ¹⁷⁹ '如何让民用船舶助力军事运输? [How to make civilian ships assist military transportation?]; People's Daily; 24 May 2019; <http://military.people.com.cn/BIG5/n1/2019/0524/c1011-31101519.html> accessed on 16 Feb 2022; (Source ID 915038)
- ¹⁸⁰ Sun Hao 孙浩, Li Lianbang 李联邦, Li Peng 李鹏; '战区主战体制下联合投任务式指挥研究 [Research on joint mission command under the main battle system of the theater]'; Journal of Military Transportation University ; 01 Nov 2018; (Source ID 276519)
- ¹⁸¹ Sun Hao 孙浩, Li Lianbang 李联邦, Li Peng 李鹏; '战区主战体制下联合投任务式指挥研究 [Research on joint mission command under the main battle system of the theater]'; Journal of Military Transportation University ; 01 Nov 2018; (Source ID 276519)
- ¹⁸² DU Yougong 杜又功, DU Gan 杜干; '民用运输船舶军事应用训练和使用管理 [Military application training and use management of civil transport ships]'; Journal of Military Transportation University ; 01 Oct 2017; (Source ID 179285).
- ¹⁸³ Zheng Weibo 郑威波; '探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]'; National Defense (国防); 01 Jul 2018; (Source ID 470002)
- ¹⁸⁴ '全国人民代表大会常务委员会关于深化国防动员体制改革期间暂时调整适用相关法律规定的决定 [Decision of the Standing Committee of the National People's Congress to Provisionally Adjust the Application of the Provisions of Relevant Laws during the Period of Deepening the Reform of National Defense Mobilization Systems]'; <https://www.lawinfochina.com>; 23 Oct 2021; <https://www.lawinfochina.com/display.aspx?lib=law&id=36703> accessed on 16 Jan 2022; (Source ID 246433)
- ¹⁸⁵ '全省国防动员和后备力量“三项基础”建设总结表彰会暨领导小组会在省军区召开 [Yin Hong emphasized at the summary and commendation meeting of the "three basics" construction of the province's national defense mobilization and reserve forces]'; gansu.gov.cn; 21 Dec 2021; <http://www.gansu.gov.cn/gsszf/c100002/c100999/202112/1923712.shtml> accessed on 16 Jan 2022; (Source ID 228819)
- ¹⁸⁶ '省军区党委十二届九次全体（扩大）会议强调深入推进全省国防动员建设高质量发展 [The 9th plenary (expanded) meeting of the 12th Provincial Military District Party Committee emphasized the in-depth promotion of the high-quality development of the province's national defense]'; yn.gov.cn; 16 Jan 2022; http://www.yn.gov.cn/zzms/ywdt/202201/t20220116_234854.html accessed on 16 Jan 2022; (Source ID 694620)
- ¹⁸⁷ '省委召开议军会议推动我省党管武装和国防动员工作高质量发展李希马兴瑞等出席 [The provincial party committee held a military meeting to promote the high-quality development of the party's armed forces and national defense mobilization work in our province. Li Xima Xingrui and others attended]'; gd.gov.cn; 16 Dec 2021; http://www.gd.gov.cn/xxts/content/post_3720232.html accessed on 16 Jan 2022; (Source ID 812363)
- ¹⁸⁸ '关于《国防交通法》，这些你应该知道 [What you should know about the National Defense Traffic Act]'; sohu.cn; 01 Oct 2021; https://www.sohu.com/a/493110248_121106991 accessed on 09 Jan 2022; (Source ID 527101)
- ¹⁸⁹ “民用运载工具因贯彻国防要求增加的费用由国家承担”

¹⁹⁰ “公民和组织完成国防运输任务所发生的费用，由使用单位按照不低于市场价格的原则支付”

¹⁹¹ '对《关于深化国防动员体制改革期间暂时调整适用相关法律规定的决定（草案）》的说明 [Explanation to the "Decision on Temporarily Adjusting the Application of Relevant Legal Provisions During the Deepening of the Reform of the National Defense Mobilization System (Draft)"]'; npc.gov.cn; 19 Oct 2021; <http://www.npc.gov.cn/npc/c30834/202110/beb570fb523a4bdbb1d3420023f732ff.shtml> accessed on 16 Jan 2022; (Source ID 950014)

¹⁹² '国家国防动员委员会综合办公室负责人就《中华人民共和国国防动员法》答记者问 [The person in charge of the General Office of the National Defense Mobilization Committee answered a reporter's question on the "National Defense Mobilization Law of the People's Republic of China"]'; <http://www.zhuxi.gov.cn/>; 03 Mar 2010; http://www.zhuxi.gov.cn/xxgkxi/zc/zcjd/202010/t20201028_3208681.shtml accessed on 16 Jan 2022; (Source ID 848057)

¹⁹³ CHEN Zijian, XIAO Xuefu, SUN Dong; '军民融合应急物流保障指挥体系的构建 [Construction of Civil-military Integrated Emergency Logistics Support Command System]'; Journal of Military Transportation University; 01 Mar 2018; (Source ID 873720)

¹⁹⁴ Zheng Weibo 郑威波; '探索构建融入联合作战指挥体系的省级国防动员指挥机构 [Explore the construction of provincial defense mobilization command structures that are integrated into the joint operational command system]'; National Defense (国防); 01 Jul 2018; (Source ID 470002)

¹⁹⁵ '全省国防动员和后备力量“三项基础”建设总结表彰会暨领导小组会在省军区召开 [Yin Hong emphasized at the summary and commendation meeting of the "three basics" construction of the province's national defense mobilization and reserve forces]'; gansu.gov.cn; 21 Dec 2021; <http://www.gansu.gov.cn/gsszf/c100002/c100999/202112/1923712.shtml> accessed on 16 Jan 2022; (Source ID 228819)

¹⁹⁶ Hou Zhonghou, Hu Yue, "A study of the Reporting Mechanisms for Submitting National Economic Mobilization Demands" 20 Oct 2019, Zhongguo Junshi Kexue,

¹⁹⁷ "Research on the Deepening Path of the National Economic Mobilization Mechanism" (国民经济动员机制的深化路径研究), 2 April 2015, Ministry of Industry and Information, accessed at <https://www.21ks.net/lunwen/guominjingjilunwen/29726.html>

¹⁹⁸ Hou Zhonghou, Hu Yue, "A study of the Reporting Mechanisms for Submitting National Economic Mobilization Demands" 20 Oct 2019, Zhongguo Junshi Kexue,

¹⁹⁹ Hou Zhonghou, Hu Yue, "A study of the Reporting Mechanisms for Submitting National Economic Mobilization Demands" 20 Oct 2019, Zhongguo Junshi Kexue,

²⁰⁰ "Research on the Deepening Path of the National Economic Mobilization Mechanism" (国民经济动员机制的深化路径研究), 2 April 2015, Ministry of Industry and Information, accessed at <https://www.21ks.net/lunwen/guominjingjilunwen/29726.html>

²⁰¹ '新时代做好国防动员潜力统计调查工作的几点思考 [Some thoughts on doing a good job in the investigation of national defense mobilization potential in the new era]'; National Defense ; 01 Aug 2019; (Source ID 465765)

²⁰² Hua Hao 华昊; '改革开放以来我国国防动员法规建设的实践与启示 [Practice and Enlightenment of China's National Defense Mobilization Law Construction Since Reform and Opening Up]'; National Defense (国防); (Source ID 489268)

²⁰³ '民用运力国防动员行政执法研究 [Administrative Enforcement in National Defense Mobilization of Civil Transportation Resources]'; Journal of Military Transportation University; 01 Aug 2018; (Source ID 922401)

²⁰⁴ '秦安：调整四法，贯彻国防动员体制改革的决策部署，打赢新型战争 [Qin An: Adjust the four laws, implement the decision-making and deployment of the reform of the national defense mobilization system, and win a new type of war]'; qq.com; 10/24/2022; <https://new.qq.com/omn/20211025/20211025A05HLX00.html> accessed on 16 Jan 2022; (Source ID 266589)

²⁰⁵ '全省国防动员和后备力量“三项基础”建设总结表彰会暨领导小组会在省军区召开 [Yin Hong emphasized at the summary and commendation meeting of the "three basics" construction of the province's national defense mobilization and reserve forces]'; gansu.gov.cn; 21 Dec 2021;

<http://www.gansu.gov.cn/gsszf/c100002/c100999/202112/1923712.shtml> accessed on 16 Jan 2022; (Source ID 228819)

206 '关于检查《中华人民共和国国防动员法》实施情况的报告 [Report on Inspection of the Implementation of the National Defense Mobilization Law of the People's Republic of China]'; <http://rd.changde.gov.cn>; 27 Jun 2019; http://rd.changde.gov.cn/rdhy/cwwhy/sqjrdcwhdesschy/content_56920 accessed on 16 Jan 2022; (Source ID 103610)

207 '军委国防动员部下设民兵预备役局边防局等单位 [The National Defense Mobilization Department of the Military Commission consists of the Frontier Defense Bureau of the Militia Reserve Bureau and other units]'; gymzxedu.com/; 20 Nov 2021; <https://www.gymzxedu.com/redian/331991.html> accessed on 00 Jan 1900; (Source ID 307829)

208 '民用运力国防动员行政执法研究 [Administrative Enforcement in National Defense Mobilization of Civil Transportation Resources]'; Journal of Military Transportation University; 01 Aug 2018; (Source ID 922401)

209 '关于检查《中华人民共和国国防动员法》实施情况的报告 [Report on Inspection of the Implementation of the National Defense Mobilization Law of the People's Republic of China]'; <http://rd.changde.gov.cn>; 27 Jun 2019; http://rd.changde.gov.cn/rdhy/cwwhy/sqjrdcwhdesschy/content_56920 accessed on 16 Jan 2022; (Source ID 103610)

210 '省军区党委十二届九次全体（扩大）会议强调深入推进全省国防动员建设高质量发展 [The 9th plenary (expanded) meeting of the 12th Provincial Military District Party Committee emphasized the in-depth promotion of the high-quality development of the province's national defense]'; yn.gov.cn; 16 Jan 2022; http://www.yn.gov.cn/zzms/ywdt/202201/t20220116_234854.html accessed on 16 Jan 2022; (Source ID 694620)

211 Liu Xing 刘兴 Yang Shangqin 杨尚钦 Cao Haiquan 曹海泉; '民用运力国防动员行政执法研究 [Administrative Enforcement in National Defense Mobilization of Civil Transportation Resources]'; Journal of Military Transportation University; 01 Aug 2018; (Source ID 922401)

212 '组建人防工程平战转换综合执法大队 接受国防动员专业保障点验 【Set up a comprehensive law enforcement brigade for civil air defense engineering peacetime and wartime conversion, and accept professional security inspections for national defense mobilization】'; <https://cg.nanning.gov.cn>; 29 Jun 2021; <https://cg.nanning.gov.cn/gzdt/zhzf/t4789401.html> accessed on 22 Feb 2022; (Source ID 373305)

213 '关于检查《中华人民共和国国防动员法》实施情况的报告 [Report on Inspection of the Implementation of the National Defense Mobilization Law of the People's Republic of China]'; <http://rd.changde.gov.cn>; 27 Jun 2019; http://rd.changde.gov.cn/zd gzj d/shjs/content_56921 accessed on 23 Feb 2022; (Source ID 171589)

214 '构建中国特色的新型国防动员体系 [Building a New National Defense Mobilization System with Chinese Characteristics]'; people.com.cn; 18 Oct 2018; <http://military.people.com.cn/n1/2018/1018/c1011-30348364.html> accessed on 23 Feb 2022; (Source ID 198342)

215 '民用运力国防动员条例 [Regulations on Civil Mobility National Defense Mobilization]'; gov.cn; 02 Mar 2019; http://www.gov.cn/gongbao/content/2019/content_5468879.htm accessed on 14 Jan 2022; (Source ID 724362)

216 Wang Fang, Guo Jing, and Wang Jizhen, "Construction of Smart National Defense Mobilization Information System of Systems," National Defense Science and Technology (Guofang Keji) Vol. 41, Iss. 2, 2020

217 Wang Fang, Guo Jing, and Wang Jizhen, "Construction of Smart National Defense Mobilization Information System of Systems," National Defense Science and Technology (Guofang Keji) Vol. 41, Iss. 2, 2020

218 '军队代表委员畅谈推进军民融合深度发展 [Military representatives talk about promoting the in-depth development of military-civilian integration]'; <http://www.china.com.cn>; 04 Mar 2017; http://www.china.com.cn/military/2017-03/04/content_40405964.htm accessed on 27 Feb 2022; Government website notice of a development plan. (Source ID 458770)

219 Wang Jianjun 王建军, Cao Zhan 曹站和 and Zhu Ning 朱宁; '后装保障指挥“变”在哪里 [Where is the "change" in the rear equipment support command?]; PLA Daily; 21 Mar 2019; http://www.81.cn/jfjbmap/content/2019-03/21/content_229733.htm accessed on 05 Feb 2022; (Source ID 923806)

220 '“GEOVIS+”国防智慧动员平台提升国防动员信息化水平 ["GEOVIS+" National Defense Smart Mobilization Platform Improves the Informatization Level of National Defense Mobilization]'; 81it.com; 25 Mar 2019; <http://www.81it.com/2019/0325/9374.html> accessed on 21 Feb 2022; (Source ID 895508)

- 221 '云时代公司运用大数据技术, 推进军民融合工作发展 [Cloud Times uses big data technology to promote the development of military-civilian integration]'; <https://www.sxctc.net/>; 01 Dec 2018; <https://www.sxctc.net/content/8971.html> accessed on 24 Feb 2022; (Source ID 473931)
- 222 Wang Fang, Guo Jing, and Wang Jizhen, "Construction of Smart National Defense Mobilization Information System of Systems," *National Defense Science and Technology (Guofang Keji)* Vol. 41, Iss. 2, 2020
- 223 '大数据时代, 国防动员插上“智慧”翅膀 [In the era of big data, national defense mobilization is equipped with "wisdom" wings]'; <http://www.mod.gov.cn/>; 03 Aug 2021; http://www.mod.gov.cn/services/2021-08/03/content_4891006.htm accessed on 00 Jan 1900; (Source ID 307117)
- 224 Wang Fang, Guo Jing, and Wang Jizhen, "Construction of Smart National Defense Mobilization Information System of Systems," *National Defense Science and Technology (Guofang Keji)* Vol. 41, Iss. 2, 2020
- 225 He Hongyuan 贺泓源, '京东、顺丰与空军后勤部达成战略合作 布局军民融合 [JD.com, SF Express and the Air Force Logistics Department reach strategic cooperation to deploy military-civilian integration]'; *The Economic Observer*; 25 Oct 2017; <https://www.eeo.com.cn/2017/1025/315365.shtml> accessed on 08 Feb 2022; (Source ID 208336)
- 226 'JD Logistics and the Air Force Logistics Department reached a strategic cooperation, and the self-built logistics model was recognized'; *Sohu.com*; 26 Oct 2017; https://www.sohu.com/a/200451584_99967243 accessed on 08 Feb 2022; (Source ID 529867)
- 227 "'加码军事物流! 德邦快递与中国兵器达成合作, 全力打造“军民融合”新样板 [Overweight military logistics! Debon Express and China Ordnance reached a cooperation to create a new model of "'military-civilian integration'"']"; *kknews.cc*; 13 Mar 2019; <https://kknews.cc/zh-cn/military/22ojxjg.html> accessed on 08 Feb 2022; (Source ID 159442) "
- 228 ZHANG Yunhong , QIAO Wei , WANG Hai , QIAO Haowe; '民用运力国防动员资源信息平台建设 [Construction of Civil Transport Capacity National Defense Mobilization Resource Information Platform]'; *Journal of Military Transportation University*; 01 Dec 2018; (Source ID 827187)
- 229 '贵州省交战办借助大数据提高保障力——大数据如何在交通战备领域“融”和“用” [Guizhou Provincial Military Affairs Office uses big data to improve support - how big data is "integrated" and "used" in the field of transportation combat readiness]'; <http://rfb.guizhou.gov.cn/>; 13 Jun 2018; http://rfb.guizhou.gov.cn/ywgz/jtzb/201806/t20180615_16251630.html accessed on 13 Dec 2021; (Source ID 957938)
- 230 ZHANG Yunhong , QIAO Wei , WANG Hai , QIAO Haowe; '民用运力国防动员资源信息平台建设 [Construction of Civil Transport Capacity National Defense Mobilization Resource Information Platform]'; *Journal of Military Transportation University*; 01 Dec 2018; (Source ID 827187)
- 231 '贵州省交战办借助大数据提高保障力——大数据如何在交通战备领域“融”和“用” [Guizhou Provincial Military Affairs Office uses big data to improve support - how big data is "integrated" and "used" in the field of transportation combat readiness]'; <http://rfb.guizhou.gov.cn/>; 13 Jun 2018; http://rfb.guizhou.gov.cn/ywgz/jtzb/201806/t20180615_16251630.html accessed on 13 Dec 2021; (Source ID 957938)
- 232 '驰援武汉须过几道关? [How many barriers must we pass to help Wuhan?]; *thepaper.cn*; 01 Feb 2020; https://www.thepaper.cn/newsDetail_forward_5705479 accessed on 14 Jan 2022; (Source ID 765453)
- 233 '货车帮与交信集团签约 共同推动国家物流信息平台建设 [Huochebang signed a contract with Jiaoxin Group to jointly promote the construction of a national logistics information platform]'; <https://www.guiyang.gov.cn/>; 03 Nov 2018; https://www.guiyang.gov.cn/jcgy/jcgyzs/jcgyzstzdt/201811/t20181103_11415782.html accessed on 27 Feb 2022; The website of a Chinese municipal government.(Source ID 928261)
- 234 ZHANG Yunhong , QIAO Wei , WANG Hai , QIAO Haowe; '民用运力国防动员资源信息平台建设 [Construction of Civil Transport Capacity National Defense Mobilization Resource Information Platform]'; *Journal of Military Transportation University*; 01 Dec 2018; (Source ID 827187)
- 235 '满帮集团再次入选中国互联网企业百强榜单 [Manbang Group was once again selected as one of the top 100 Chinese Internet companies]'; *qq.com*; 16 Nov 2020; <https://xw.qq.com/amphhtml/20201116A0HSYF00> accessed on 14 Jan 2022; (Source ID 971547)

- ²³⁶ ZHANG Yunhong , QIAO Wei , WANG Hai , QIAO Haowe; '民用运力国防动员资源信息平台建设 [Construction of Civil Transport Capacity National Defense Mobilization Resource Information Platform]'; Journal of Military Transportation University; 01 Dec 2018; (Source ID 827187)
- ²³⁷ '交通运输部关于印发《推进综合交通运输大数据发展行动纲要（2020—2025 年）》的通知 [Notice of the Ministry of Transport on Printing and Distributing the Action Outline for Promoting the Development of Comprehensive Transportation Big Data (2020-2025)]'; Gov.cn; 16 Dec 2019; http://www.gov.cn/xinwen/2019-12/16/content_5461503.htm accessed on 27 Feb 2022; Government website notice of a development plan.(Source ID 753256)
- ²³⁸ ZHANG Yunhong , QIAO Wei , WANG Hai , QIAO Haowe; '民用运力国防动员资源信息平台建设 [Construction of Civil Transport Capacity National Defense Mobilization Resource Information Platform]'; Journal of Military Transportation University; 01 Dec 2018; (Source ID 827187)
- ²³⁹ '在完善法规体系中提高国防动员能力 [Improving national defense mobilization capabilities in improving the system of laws and regulations]'; National Defense Daily; http://www.mod.gov.cn/regulatory/2019-02/28/content_4836861.htm accessed on 22 Jan 2022; (Source ID 731353)
- ²⁴⁰ '加快建设国防动员潜力大数据 [Accelerate the construction of big data of national defense mobilization potential]'; National Defense Daily; 22 May 2020; http://www.81.cn/gfbmap/content/21/2020-05/22/03/2020052203_pdf.pdf accessed on 21 Jan 2022; (Source ID 960396)
- ²⁴¹ Hua Hao 华昊; '改革开放以来我国国防动员法规建设的实践与启示 [Practice and Enlightenment of China's National Defense Mobilization Law Construction Since Reform and Opening Up]'; National Defense (国防); (Source ID 489268)
- ²⁴² '2021 年全国国防动员潜力数据资料集中会 [The 2021 National Defense Mobilization Potential Data Collection Meeting]'; 81.cn; 09 Jul 2021; https://www.81.cn/dy/2021-07/09/content_10060054.htm accessed on 21 Jan 2022; (Source ID 984900)
- ²⁴³ '新时代做好国防动员潜力统计调查工作的几点思考 [Some thoughts on doing a good job in the investigation of national defense mobilization potential in the new era]'; National Defense ; 01 Aug 2019; (Source ID 465765)
- ²⁴⁴ Qu, X.Y. 2014. The system of mobilization ability construction lead defense mobilization innovation and development. National Defense, 10,19-22 DOI: 10.15969/j.cnki.11-2770/e.2014.10.009
- ²⁴⁵ Xu, K. 2016. Practice and Exploration in the Building of National Defense Mobilization System of New China. Contemporary China History Studies, 13 ,29-36. DOI: 10.3969/j.issn.1005-4952.2006.01.004.
- ²⁴⁶ Rao, N., and Cheng, K.L. 2016. Defense mobilization big data application prospect and countermeasures. National Defense, 11,31-33. DOI: 10.3969/j.issn.1002-4484.2016.11.011
- ²⁴⁷ '开创动员潜力调查新局面 [Create a new situation in the investigation of mobilization potential]'; National Defense Daily; 24 Jun 2020; https://www.81.cn/gfbmap/content/21/2020-06/24/03/2020062403_pdf.pdf accessed on 21 Jan 2022; (Source ID 842160)
- ²⁴⁸ '推进国防动员潜力大数据建设 [Promote the construction of big data of national defense mobilization potential]'; <http://rfb.guizhou.gov.cn/>; http://rfb.guizhou.gov.cn/ywgz/gfjy/202106/t20210617_68625615.html accessed on 23 Jan 2022; (Source ID 556739)
- ²⁴⁹ '加快建设国防动员潜力大数据 [Accelerate the construction of big data of national defense mobilization potential]'; National Defense Daily; 22 May 2020; http://www.81.cn/gfbmap/content/21/2020-05/22/03/2020052203_pdf.pdf accessed on 21 Jan 2022; (Source ID 960396)
- ²⁵⁰ '2021 年全国国防动员潜力数据资料集中会 [The 2021 National Defense Mobilization Potential Data Collection Meeting]'; 81.cn; 09 Jul 2021; https://www.81.cn/dy/2021-07/09/content_10060054.htm accessed on 21 Jan 2022; (Source ID 984900)
- ²⁵¹ '开创动员潜力调查新局面 [Create a new situation in the investigation of mobilization potential]'; National Defense Daily; 24 Jun 2020; https://www.81.cn/gfbmap/content/21/2020-06/24/03/2020062403_pdf.pdf accessed on 21 Jan 2022; (Source ID 842160)
- ²⁵² KONG Zhaojun, SHI Wenqiang, HAN Qiulu; '大数据时代国防动员潜力调查之路 [The Method of the National Defense Mobilization Potential Investigation in Big Data Era]'; Journal of Beijing Institute of Technology (Social Sciences Edition); 01 Jan 2018; <http://journal.bit.edu.cn/sk/article/id/20180114> accessed on 23 Jan 2022; (Source ID 896234)

²⁵³ Source ID 465765: '新时代做好国防动员潜力统计调查工作的几点思考 [Some thoughts on doing a good job in the investigation of national defense mobilization potential in the new era]'; National Defense ; 01 Aug 2019; (Source ID 465765)

²⁵⁴ Wang Fang, Guo Jing, and Wang Jizhen, "Construction of Smart National Defense Mobilization Information System of Systems," National Defense Science and Technology (Guofang Keji) Vol. 41, Iss. 2, 2020

²⁵⁵ '北斗+国防动员，如何实现质的飞跃 [Beidou + national defense mobilization, how to achieve a qualitative leap]'; Xinhua; 12 Apr 2017; http://www.xinhuanet.com/mil/2017-04/12/c_129529978.htm accessed on 21 Feb 2022; (Source ID 737128)

²⁵⁶ '从疫情防控看大数据的国防动员应用 [From the perspective of epidemic prevention and control, the application of big data for national defense mobilization]'; <http://rfb.nmg.gov.cn/>; 29 Feb 2020; http://rfb.nmg.gov.cn/fkcz/fzcs/202102/t20210219_968860.html accessed on 21 Feb 2022; (Source ID 100014)