

Discussion on the Practice of Bidding and Purchasing for New Equipment

Xu Li¹, Xiangfeng Zhang¹, Hui Liu¹, Song Liu¹, Kai Yu¹, Jingjing Geng¹

¹Second Military Representative Office in Shijiazhuang, Shijiazhuang, China.

Abstract

This paper analyzes the characteristics and scope of application of bidding procurement for new equipment, and puts forward suggestions and measures on how to improve the bidding procurement for new equipment based on the practice of bidding procurement for a certain equipment.

Keywords

New equipment; Bidding procurement.

1. Introduction

With the development of the new military revolution in the world and the military struggle situation around China, the demand for high-tech equipment in our army is becoming more and more urgent. Objectively, it is required that the equipment procurement departments and suppliers shorten the development cycle of new equipment, optimize the equipment ordering and production procedures, mobilize the high-quality resources of the whole society, and provide the troops with weapons and equipment with excellent performance, reliable quality and reasonable price. Gjb3898-99 "procedures for military representatives to participate in the bidding of weapon equipment development and procurement" has made provisions. After more than ten years of development, the new procurement mode of breaking monopoly, introducing competition and promoting rapid development of equipment bidding procurement has come to the front. Gjb3898a-2006 "requirements for military representatives to participate in equipment procurement bidding work", based on the original standards, new contents are injected, new experience of bidding work is supplemented, all work is further improved, and it is in line with the latest development of practice. It can be said that the implementation of bidding procurement for new equipment is the innovation of equipment procurement in our army, the practice of scientific development concept, and the important means and ways for the army to acquire advanced weapons and equipment and quickly form combat effectiveness. Therefore, it is very necessary to strengthen the research and analysis of the bidding procurement of new equipment. This paper only talks about the practice of equipment bidding and purchasing.

2. Characteristics of New Equipment Bidding

In summary, the bidding procurement of new equipment has five remarkable characteristics: first, the bidding procurement fully reflects the survival of the fittest in the market economy, the optimization of resource allocation, and meets the strong desire and urgent demand of the army to spend the least money, obtain the best equipment in the shortest time. Second, bidding and procurement has opened the door for enterprises, institutions, colleges and universities of all types of ownership to participate in the bidding of military products and engage in equipment production, greatly mobilizing the enthusiasm of all parties in the society, and broadening the channels for the army to choose the best. Third, the bidding procurement is based on the Contractor's self financing, self project approval, self risk, and completion of all

military product development work, and the product has passed the technical identification platform, that is, the military is involved at the time when the product that meets the needs of the army has objectively existed, so the risk of new equipment procurement is controlled to the greatest extent. Fourth, the principle of fairness, fairness and openness is adhered to in the bidding procurement, and the unity of interests and risks is taken into account, which promotes the benign interaction between the supply and demand sides and the friendly competition between the bidders. Fifthly, bidding procurement is facing severe challenges as well as opportunities for both military and civilian sides. Due to the restriction of China's overall industrial development level and the influence of many factors such as the old traditional thinking mode and management system, there are relatively few cases of bidding procurement for new equipment in reality, and the difficulty and resistance of promotion still exist.

3. Scope of Application of New Equipment Bidding Procurement

In theory, bidding procurement is generally used in the procurement of all kinds of weapons and equipment in the army. However, in view of the inherent characteristics of large-scale and complex weapons and the comprehensive strength of the whole machine manufacturing unit, if the state and the army do not inject funds, do not develop through planned scientific research demonstration and project approval channels and directly enter the bidding procurement, not only the operability is poor, but also the potential risks of all parties are relatively large. Therefore, large-scale and complex weapons and equipment should not be included in the scope of new equipment procurement. In comparison, some miniaturized, high-tech equipment used in individual combat or supporting subsystems are more suitable for bidding procurement. Specifically, the products suitable for bidding procurement should have the following two conditions: first, the products are relatively simple, the overall cost is not high; second, the social resources are rich, and there are many suppliers. There are four situations that meet the above conditions: first, tracking the development trend of the world's weapons and equipment, adopting the existing mature technology, and developing new equipment through link assembly and synthesis. Second, the transformation and upgrading of weapons and equipment in active service. The manufacturers who have been engaged in equipment production and supply for many years are most familiar with the performance characteristics of the active military equipment, the development direction of the technology and weapons equipment they are engaged in, and the needs of the army. They can develop new products with the help of the existing technology base platform, which are superior to the active military equipment in terms of their functional performance without too much investment. Third, some civil products are included in the scope of equipment procurement. It is self-evident that the mass basis and the strength of manufacturers of civil products. With the development of the battlefield situation and the change of the combat style, driven by the demand of the army, some of the traditional pure civilian products are also the important source of the new equipment of the army. Fourth, most of the products matched with the whole equipment. Such as all kinds of on-board electronic instruments, small-scale ground equipment, vehicle chassis, gasoline and diesel engines and all kinds of shell fuses and so on.

4. Measures to Improve the Bidding and Purchasing of New Equipment

Bidding procurement is an important supplement to the military equipment procurement mode, and the direct implementation of bidding procurement for new equipment is the pioneering work in the field of military equipment procurement. The advantages and characteristics of new equipment procurement by bidding are the inevitable result of the development of society and represent the direction of advanced productivity. However, the resistance and problems encountered in the implementation of new equipment bidding and

procurement should also be paid attention to by all parties, and corresponding measures should be taken to improve and solve them.

On organization and implementation. First of all, in terms of conceptual thinking, it is necessary to really open the door, remove the restrictions of rules and regulations, and let the powerful manufacturers of different industries and types of ownership enter the circle. Through organizing the qualification examination of equipment manufacturing units, they are listed in the list of equipment manufacturing units to participate in it and survive the fittest on the fair competition platform. Secondly, we should follow the objective law of the development of weapons and equipment, adhere to the systematic and efficient thinking, grasp the key points of safety and reliability, comprehensively promote the unity of demand and reality, and strive for combat effectiveness in time. Third, the military should be open and transparent in the form of procurement bidding. It should issue a bidding document in advance to announce the security of the people, reiterate the needs of the army, and clarify the requirements of tactical and technical indicators, so that the bidders can have a targeted view and show their strength in a relatively sufficient time. Fourth, the evaluation experts invited by the military evaluation committee must be objective and fair, and the evaluation opinions shall be responsible for the country and the army. Fifthly, in order to protect the enthusiasm of the bidding units and maintain the competitive situation for a long time, the military should try to determine two winning units according to the total demand of the troops. Sixthly, in view of the long development cycle of new equipment, the rapid development of new technology and the great changes in the demand of the army, it is advisable to try out the method of twice bidding. That is to say, on the basis of scientific research project bidding for the same new product, bidding procurement for new equipment participated by multiple units shall be conducted timely. According to the above procedures and basic principles, the multi ammunition bidding procurement of a single weapon platform has attracted seven enterprises including weapon factory, Research Institute, ammunition factory, fuze factory and private enterprise to participate in the bidding competition, breaking the boundaries of industry and ownership. Through the tender, the physical comparison of the function and performance of the prototype on site, the expert evaluation, and the decision-making of the leading authorities, the military finally determined the tender manufacturer with the highest cost performance to undertake the procurement and production tasks of various bombs, and achieved better economic and military benefits.

On timing and operability. The most important thing for the whole machine to be purchased by bidding is the will of the manufacturer and the determination of the military. As long as there are more than two manufacturing units involved, the military can organize the implementation. In peacetime, the military and local governments should strengthen the information communication between the equipment demand and the research, production and supply capacity of enterprises, establish the overall situation awareness and sense of urgency, and promote the maturity of the opportunity through two-way interaction. At the same time, the implementation plan of bidding and procurement can also be formulated in accordance with the actual scientific research progress of specific products. In the annual new equipment procurement plan, the military should also focus on the selection and arrangement of new equipment urgently needed by the army to carry out bidding procurement pilot in succession, so as to accumulate experience. The above thinking method is also applicable to the purchase of general supporting equipment and maintenance equipment by the military. As far as the special supporting products are concerned, the implementation of bidding procurement for them is actually the problem of the whole machine factory's selection and selection of the designated manufacturers of supporting products. Its initiative is mainly in the whole machine factory and the military representative office of the whole machine factory. Generally, there is no problem of poor operability, so it should be vigorously promoted. For example, because two

fuze manufacturers are selected to produce and supply at the same time, and the purchase quantity is determined according to the best choice, not only the production progress of the special task of the projectile is guaranteed, but also the quality of the fuze is improved. Their practice is worth learning.

On risk control. The characteristics of bidding and purchasing of new equipment determine that the product development process is not within the scope of military monitoring. In order to complete the product development in the shortest time, as well as the funding constraints, the manufacturing unit is not going through standardized scientific research procedures objectively. Although the final product meets the requirements of the army through technical identification, considering the risk control of the army, the military should add necessary qualification confirmation procedures before the contractor participates in the bidding. That is to say, the qualification examination of the equipment manufacturer shall be carried out: the scientific research process of the product shall be examined; the functional performance test data shall be rechecked; the inspection and acceptance specifications shall be examined; the reputation of the manufacturer and the ability to continuously serve the Army shall be examined; and the Military Representative Office designated by the military shall issue written inspection and evaluation opinions. For the products winning the bid after bidding, the military shall specify the solutions to the remaining problems and targeted supplementary requirements in the contract terms, strengthen the pre delivery review of the first batch of products, and comprehensively track the implementation of the contract terms.

On the role of military representatives. The military representative is the representative assigned by the army to the manufacturing unit. Working in the front line of research and production of weapons and equipment, he is not only familiar with the equipment demand and research and production status, but also clear about the comprehensive strength and performance reputation of the manufacturing unit. Therefore, we should pay attention to the opinions and suggestions of military representatives in the bidding and procurement of new equipment, and give full play to the role of military representatives as a bridge. The military representatives themselves should also adhere to the principles, fulfill their missions and responsibilities, and actively contribute to the rapid development of military equipment and the formation of combat effectiveness. Gjb3898a-2006 has clearly standardized the requirements for military representatives to participate in equipment procurement bidding, and military representatives should study and strictly implement them. In the bidding and procurement of an equipment, the military representative actively encourages and supports the enterprises to participate in the bidding competition from the emergency needs of the army, studies and develops the product development plan together with the manufacturer, actively participates in the test and review of important nodes in the development process, and actively provides consultation for the formulation of the manufacturing acceptance specification and reliability test plan, so as to provide the manufacturer with product participation It laid a solid foundation for the final bid.

References

- [1] Bidding Law of the people's Republic of China, 2017.
- [2] Zhou Yanhai, Xia Aijun. Research on the pricing of equipment bidding procurement [J]. Contemporary economy, 2011:54-55.
- [3] Jiang Shijun. Development and trend of construction project bidding [J]. China Science and technology information 2005 (14).