

BIDDING PROCESS FOR THE ACQUISITION OF USED AIRCRAFT: EFFICIENCY AND ECONOMICS IN THE BIDDING PROCESSES OF THE MILITARY HOUSE OF PARANÁ



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ABSTRACT

This study analyzes the bidding processes for the acquisition of aircraft used by the Military House of the State of Paraná in the years 2020 and 2025, considering the transition from Law No. 8,666/1993 to Law No. 14,133/2021. The research, based on an Experience Report, identified challenges and advances in the adoption of this type of acquisition, previously unexplored by the State. The methodology involved document analysis, market research and comparison between the bidding processes. The results demonstrate that the purchase of used aircraft is a viable and advantageous alternative, ensuring economy and efficiency, without compromising operational safety. The experience acquired contributed to the improvement of bidding practices, enabling greater competitiveness and transparency in the acquisition of public goods.

Keywords: Public Bidding. Aircraft Acquisition. Public administration. Economy. Electronic Auction.

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INTRODUCTION

The bidding process in the public administration finds a constitutional basis in article 37, item XXI, of the Federal Constitution of 1988, whose purpose is to guarantee equal conditions among competitors and ensure the selection of the most advantageous proposal for the administration. In addition, article 173, item III, reinforces the need to observe the principles that govern public administration (BRASIL, 1988).

The fundamental principles of public administration are expressly provided for in the caput of article 37 of the Constitution, highlighting legality, impersonality, morality, publicity and efficiency. The latter was incorporated through Constitutional Amendment No. 19/1998, consolidating the requirement that public management be guided by the optimization of resources and the search for better results (BRASIL, 1998).

Bandeira de Mello (2017) highlights that the principle of efficiency stems from the principle of good administration, determining that administrative activity must be conducted in the most appropriate, timely and aligned manner with institutional objectives. According to the author, decision-making in the scope of public administration must always seek excellence. From this same perspective, Carvalho Filho (2014) emphasizes that the principle of efficiency is directly related to productivity and economy, functioning as a constitutional guideline to minimize waste and optimize the application of public resources.

Efficiency in public management is especially relevant in sectors that involve the intensive use of resources, as is the case of state public aviation. In the State of Paraná, air operations are conducted by three Public Air Units (UAPs): the Air Operations Group (GOA) of the Civil Police, the Military Police Battalion of Air Operations (BPMOA), and the Air Transport Division of the Military House (DTA/CM). The latter, in addition to operating the state's executive aviation, in the transport of Authorities, plays a fundamental role in supporting the activities of the Civil Defense, the Department of Health – Organ and Tissue Transplant Center and the State Bed Regulation Center. It also participates, in a subsidiary manner, in public security operations, in addition to other related missions.

The fleet of UAPs in the State of Paraná is composed of aircraft acquired in previous administrative periods or incorporated into public assets through criminal seizure. However, the acquisition of new aircraft through a bidding process presents significant challenges, since the market for manufacturers and models is restricted, the amounts involved are high, and there are specific regulatory requirements that add extra layers of complexity to the bidding procedure (PEARSON and RILEY, 2015).

Historically, in the State of Paraná, aircraft acquisition processes were conducted exclusively for the purchase of new aircraft, ignoring the possibility of acquisition in the market of used aircraft. Until the year 2020, there are no records of purchases of this nature made through bidding. However, this alternative has always been viable, as it is widely used in the private sector by companies, entrepreneurs, executives, and individuals with high purchasing power. In this way, good practices of private management could be adapted to public administration, ensuring greater efficiency and economy in the management of public resources (DRUCKER, 1999).

The search for improvement in the processes of acquisition of goods and services from the perspective of economy and efficiency should be a constant goal of the public administration (JUSTEN FILHO, 2021). In this context, DTA/CM, together with the Bidding and Contracts Section of the Military House, began to study strategies to enable the acquisition of aircraft used in the State of Paraná. As a result of this effort, the acquisition of three used aircraft was carried out, one in 2020 and two others in 2025, demonstrating the feasibility of this alternative and its compatibility with the principles of public administration.

Given this scenario, the present study aims to describe and analyze the processes of acquisition of used aircraft carried out by the Military House of the State of Paraná in the years 2020 and 2025.

DEVELOPMENT

METHOD

The research is characterized as an Experience Report, a methodology widely used in studies on public bids and contracts for the dissemination of good practices, as demonstrated by Barroso (2020), Melo (2020) and Almeida (2019).

For the development of the study, the bidding processes were analyzed, with the reading and recording of the main aspects related to acquisitions. Then, the bidding modalities used, the dispute processes and the evaluation criteria of the aircraft to be acquired were verified. From this information, a comparative aspect was established between the first and second bidding process, in order to identify advances and challenges in the acquisition of used aircraft.

The setting of this study is the Air Transport Division of the Military House - DTA/CM, the unit responsible for the management of executive aviation in the State of Paraná. The Military House of the Governorship has administrative and financial autonomy, with a team

specialized in bidding, as well as a technical advisory responsible for verifying the legal formalities of the processes before forwarding them to the State Attorney General's Office - PGE.

Initially, in step 01 called data collection, a survey was carried out on the main transparency portals of the states and on platforms specialized in the disclosure of notices and bids. The objective of this stage was to identify how the UAPs carried out the acquisition of aircraft and, in parallel, to understand how the private sector met this need. Based on this information, DTA/CM, together with the Bidding and Contracts Section and the Technical Advisory of the Military House, began to develop strategies for defining the specification of the aircraft, the most appropriate bidding modality and the form of dispute to be used in the event.

In the second stage, we sought to identify the average price of the aircraft in the market, in order to establish a maximum value for the acquisition. Unlike the traditional system, which provides for the forwarding of the Term of Reference for direct quotation with potential suppliers, an alternative approach was chosen: prices of similar aircraft were analyzed in specialized publications, ensuring a parameter more aligned with the market value.

Finally, in the third stage, the specifics of the acquisition of used aircraft were analyzed, including the taxes levied and the necessary precautions to ensure the acquisition of goods in adequate airworthiness conditions and free of hidden defects. For this, information was sought from the Bidding Center of the Secretariat of Public Security (SESP) and the Department of Logistics for Public Procurement (SEAP/DECON) and from experiences of other federation units, in order to obtain subsidies and references from the experience of these agencies in similar contracts.

Based on these studies, the Military House team structured the bidding process, taking as a reference good business management practices. Several meetings were held to define the criteria of the event, culminating, in 2020, in the adoption of the Auction modality. After the process was formatted, it was forwarded for analysis by the Technical Advisory of the Military House, which, upon evaluating the regularity of the claim, submitted it to the PGE's legal statement.

Given the innovative nature of the methodology used and the possibility of repercussions for the public administration, the legal statement of the attorney in charge

was sent to the State Attorney General, who fully approved the procedure without any reservations.

With this, the first bidding process was carried out for the acquisition of a used aircraft by the State of Paraná, resulting in the acquisition of the King Air C90 aircraft, registration PT-OZL. Subsequently, in 2025, a second bidding process was conducted, this time in the Electronic Auction modality, in the approval phase for the acquisition of two aircraft: a King Air 350, year 2008, and a Cessna Grand Caravan EX, year 2012.

RESULTS

STEP 01 – DATA COLLECTION

Initially, the requirements for the aircraft to be acquired were established, considering the year of manufacture, engine, passenger capacity, flight autonomy and power.

In the comparative analysis between the acquisition of new and used aircraft, it was found that, until 2020, before the launch of the bidding that resulted in the acquisition of the King Air C90 aircraft, there were no records of bidding processes in Brazil that specified the purchase of used aircraft.

However, the studies indicated that the acquisition of used aircraft was an economically viable and more agile alternative to meet operational needs, considering that the average delivery time of new aircraft exceeds 12 (twelve) months.

In the first case, the statement of the State Attorney General's Office (PGE) analyzed the feasibility of the acquisition of used goods and recognized the legality of the procedure, citing examples of other bids for used movable goods. However, none of these precedents specifically involved aircraft. In the second case, the issue was not examined in detail, as the issue was already consolidated.

BIDDING MODALITY AND FORM OF DISPUTE

The two bidding processes analyzed showed significant differences in terms of the bidding modality and form of dispute, since the first process (2020) took place under the aegis of Law 8,666/1993 and State Law 15,608/2007. The second process (2025) was conducted based on Law 14,133/2021, which modernized bidding procedures in Brazil.

From the beginning, it was clear that the Auction was the most appropriate modality. However, the judging criteria needed adjustments to ensure that the most advantageous

proposal was selected, since the aircraft offered could present significant variations in time of use, state of conservation and maintenance history.

The solution found was to adopt a dispute model based on the highest percentage of discount on the appraisal of the property, ensuring that the selection was not based only on the lowest absolute price. This methodology ensured greater isonomy in the comparison between aircraft with different characteristics and operational histories.

Face-to-face Auction No. 021/2020

The Face-to-Face Auction No. 021/2020 was held under Laws 8,666/1993 and 15,608/2007, and was initially planned for the acquisition of two aircraft, with a budget forecast of R\$ 12.5 million. However, due to fiscal restrictions resulting from the COVID-19 pandemic, the budget was reduced, allowing the purchase of only one aircraft, with a maximum value of R\$ 5.515 million.

Although State Decree No. 33/2015 determined the preference for the electronic modality, the system used by the State of Paraná (Licitacoes-e, of Banco do Brasil) had operational limitations for carrying out the dispute in the electronic format. In addition, there was fear about the lack of prior control over the proposals, which could generate difficulties in the bidding phase. In view of this, exceptions were requested and granted for the holding of the auction in person.

The public session took place on December 15, 2020, with only one bidder and one company that was present as an observer, which frustrated the expectation for the dispute stage of the event. As a result, the negotiation was made directly with the participating company, without dispute of successive bids.

Electronic Auction No. 92183/2024

Electronic Auction No. 92183/2024 was conducted under Law 14,133/2021, using the Federal Government's ComprasNet platform. Unlike the previous process, there was no budget dehydration, and the bidding was maintained for two aircraft.

The experience acquired in the first process allowed greater security in the formulation of the bid, expanding the scope of the bidding to potential national and international suppliers. The electronic modality allowed the participation of companies, individuals and brokers, enabling offers of aircraft located abroad.

To ensure transparency and predictability in the dispute, the notice established representative rules for the formulation of proposals, facilitating the comparison of the discount percentages offered by bidders. Although it initially generated doubts, the methodology contributed to a more competitive bid.

AIRCRAFT EVALUATION METHODOLOGY

The evaluation of the aircraft was a critical factor to ensure an advantageous acquisition for the State and ensure equality between the bidders.

In the bidding process in which there is a comparison of assets with different levels of preservation and use, it was necessary to define the criteria in detail, in order to ensure equality of conditions according to Article 37, XXI of the Federal Constitution (BRASIL, 1988).

In view of the need for an objective methodology widely recognized by the aeronautical sector, the Aircraft Bluebook was adopted, a publication specialized in the North American market, used globally for aircraft pricing.

Aircraft Bluebook provides an online subscription system that allows access to market values for various aircraft, considering the year of manufacture, time of use, state of conservation, and aircraft accessories and modifications.

From this model, it was possible to establish standardized criteria for the bidders themselves to carry out the evaluation of their aircraft, without prior interference from the public administration, preserving the confidentiality of the proposals.

STEP 02 – MAXIMUM VALUE FOR THE ACQUISITION

MAXIMUM BID PRICE

To define the maximum price of the bid, publications on specialized websites were analyzed, looking for aircraft similar to those described in the notice.

In the first case, the maximum value was established based on the average market prices. In the second process, adjustments were incorporated to consider the costs of nationalization of imported aircraft, avoiding distortions in the reference values.

In addition, a paradigm percentage was identified, that is, the difference between the value announced for aircraft already nationalized and the evaluation carried out in the Aircraft Bluebook. This percentage was used as a reference for the formation of prices in the event.

STEP 03 – LEGAL MEASURES

The adoption of specific legal measures was essential to ensure the legal certainty of the bidding process and allow the acquisition of used aircraft in a transparent and efficient manner.

In the first process (2020), the event was limited to the participation of bidders who offered aircraft already nationalized, that is, registered and regularized in Brazil. This restriction was adopted because, at that time, allowing the participation of intermediary companies that offered aircraft yet to be imported represented a significant operational risk.

The main challenges involved: 1) the need to provide for advance payments to cover import costs; 2) difficulties in carrying out the pre-purchase inspection abroad, which could compromise the verification of the real condition of the aircraft; 3) tax and regulatory complexity, considering the taxes levied on imports and the need for compliance with ANAC standards.

Thus, to mitigate these risks, the first process was restricted to aircraft already nationalized. In addition, it was established that the costs of the pre-purchase inspection would be borne by the winning bidder, unlike what occurs in the private sector, where the buyer usually bears this expense. This decision was taken because, for the public administration, assuming this cost would require an ancillary bidding process, the object of which would be uncertain, as it would not be possible to predict when, where and on which aircraft the inspection would be carried out.

In the second process (2025), there was greater flexibility in the rules, allowing the participation of companies that offered aircraft to be imported. To make this expansion possible, additional legal measures were adopted, including: 1) detailing the payment phases and guarantees, including the obligation to present insurance, licenses and tax documentation before the release of amounts; 2) specification of the bidder's responsibilities, making it clear that the costs and risks of the import were his sole responsibility, avoiding risks for the public administration; 3) Provision of tax and regulatory requirements, ensuring that imported aircraft fully comply with ANAC and Federal Revenue Service standards.

Although these measures have allowed greater competitiveness in the auction, in practice, the bidders of the auction chose to offer only aircraft already nationalized, eliminating the need to apply import rules.

Even so, the provision of these measures in the tender protocol was essential to ensure legal certainty and expand the number of potential bidders, contributing to obtaining the most advantageous proposal for the public administration.

THE QUESTION OF IMPORTS

The possibility of participation of companies offering aircraft to be imported required an in-depth study during the internal phase of the bidding, since the amounts involved were high and any failure could generate substantial losses to the public administration.

One of the challenges was to avoid the participation of companies quoting aircraft registered in countries whose aeronautical regulations were precarious. To this end, the criterion was adopted to limit participation to aircraft from countries that are members of the ICAO (International Civil Aviation Organization) Council. This criterion ensured that the aircraft followed certification standards compatible with the regulations of the National Civil Aviation Agency - ANAC, providing greater security to the transaction.

Another challenge concerned the pre-inspection of aircraft located abroad. To solve this issue, two possibilities were foreseen: 1) remote pre-inspection by videoconference, allowing a preliminary verification of the aircraft's condition; 2) sending public agents to the location of the aircraft, with a budget forecast to cover travel and lodging expenses, ensuring a detailed analysis in loco.

In addition, the issue of payment of the aircraft before the transfer was resolved with the adoption of an Escrow Agent and an Escrow Account, mechanisms widely used in international trade to ensure that the amount is only released after all contractual conditions have been fulfilled.

Despite these precautions, the aircraft acquired in the second auction were already nationalized, eliminating the need for practical application of the precautionary measures provided for. However, the provision of these mechanisms increased the competitiveness of the event and ensured the legal certainty of the bidding.

THE PAYMENT STEPS

The definition of the payment stages was a critical point in the planning of the bidding, especially in the second bid, which allowed the participation of intermediary companies and aircraft not yet nationalized.

In the first process (2020), the payment was made in a single step, with the possibility of an advance payment of up to 20% of the total amount, provided that it is accompanied by a guarantee of advance payment. This advance installment was intended to cover emergency costs arising from any discrepancies identified in the pre-purchase inspection.

In the second process (2025), the experience gained allowed for more detailed planning, establishing a payment schedule in three stages: 1) down payment (5%) – initial deposit to guarantee the sales commitment; 2) provisional receipt (up to 80%) – principal payment, subject to delivery of the aircraft and compliance with contractual requirements; 3) definitive receipt (15%) – final installment, paid only after the definitive validation of the aircraft's conditions.

For imports, the use of an Escrow Account was foreseen, ensuring that the amounts were only released after proof of compliance with the conditions established in the contract.

These measures were essential to mitigate risks and ensure greater security for both the public administration and the bidders.

PROBLEMS EXPERIENCED IN THE EXTERNAL PHASE

Some challenges arose during the external phase of the bidding processes, requiring adjustments to ensure the success of the bid.

In the first bidding there was an error in the evaluation of the aircraft by the only bidder who undervalued the aircraft when filling out the evaluation worksheet. To maintain the established discount percentage, the company agreed to correct the evaluation without modifying the final value of the proposal.

In the second bid, the dispute model based on a percentage discount on the evaluation generated initial doubts among the bidders, resulting in a significant number of requests for clarification. The publication of errata and responses to clarifications to the public notice resolved these issues.

The difficulty in importing was a worrying factor for the process, since there are no records of public contracts for the acquisition of aircraft used as a paradigm. However, this difficulty was overcome because the bidders chose to offer aircraft already nationalized.

Despite the challenges, the adjustments made allowed for a more competitive process in the second auction, with six bidders competing in each lot, ensuring a better cost-benefit ratio for the State of Paraná.

CONCLUSION

The bidding processes for the acquisition of aircraft by the Military House of the State of Paraná demonstrate the importance of a strategic and flexible approach in public management, aiming at efficiency, economy and legal certainty. The comparison between the 2020 and 2025 processes shows the evolution of the public administration in adapting to the new legal guidelines, with the transition from Law 8,666/1993 to Law 14,133/2021, in addition to the incorporation of the alternative of acquisition of used aircraft, which was not considered until then.

The experience acquired in the first bidding process, conducted through face-to-face bidding, evidenced the need for greater specialization and structuring to deal with the aeronautical market, especially with regard to the valuation of these assets and the conduct of the dispute. In the second process, the adoption of the electronic auction, added to a more robust methodology to attract bidders and a clear model of evaluation and dispute, resulted in greater competitiveness, transparency and security for the public administration.

In addition, the incorporation of good practices from the private sector — such as the search for more economical and agile solutions, without prejudice to compliance with legal and regulatory requirements — contributed to the improvement of bidding processes in the acquisition of public goods. The continuous improvement of these processes and transparency in decision-making are essential factors to ensure the quality and effectiveness of the services provided to society.

The methodology for evaluating the aircraft, which is essential to ensure an advantageous acquisition, was rigorously structured based on the specialized publication Aircraft Bluebook, ensuring a transparent, isonomic and competitive process, in accordance with the principles of public administration. The definition of the maximum price of the bidding was based on recent market transactions, considering the particularities of the national context and the costs of nationalization of the aircraft.

The legal measures established in the public notice were crucial to ensure legal certainty and compliance with ANAC's regulatory standards, especially in relation to the import of aircraft and the performance of pre-purchase inspections. In the first bid, participation was restricted to aircraft already nationalized, while the second process expanded the scope, allowing the participation of companies with proposals for aircraft to

be imported, provided that the necessary guarantees for compliance with tax and safety obligations are observed.

As for the payment steps, the process was carefully outlined, with the use of secure financial mechanisms, such as the Escrow Account, for imported aircraft. The clear definition of these steps was essential to ensure transparency, predictability and fairness to the participants.

However, during the external phase of the bidding, adjustments were necessary to correct discrepancies in the technical requirements and evaluations of the aircraft, which resulted in changes in the established criteria and even in the revision of values to adapt to the market. The active interaction with the bidders demonstrated the interest in the event, but also required efficient management to resolve doubts and avoid inconsistencies in the notice.

The success of the bidding processes — which resulted in the acquisition of high-quality aircraft, in accordance with legal and technical standards — shows the effectiveness of the methodology adopted and the importance of constant adaptation to the particularities of the aeronautical market. In this way, the public administration was able to make an advantageous, safe acquisition in line with the principles of legality, morality and transparency.

FINAL CONSIDERATIONS

The results of this study demonstrate that it is possible to innovate in public administration, seeking alternative strategies that ensure efficiency without compromising legality. Thus, it is concluded that it is feasible to improve the processes of acquisition of goods and contracting of services, as long as they are supported by the relevant legislation and aligned with the principles of economy and efficiency.

The acquisition of used aircraft, although unusual in public administration, has legal support and represents a viable alternative, provided that savings in contracting and the adoption of precautionary measures that protect public assets and ensure the acquisition of goods in full conditions of use are demonstrated.

In the cases analyzed, each step of the process was detailed and structured to ensure speed, transparency and legal certainty, resulting in advantageous acquisitions for the State.

It is important to note that the first bidding process was conducted under Law No. 8,666/1993 and State Law No. 15,608/2007, while the second process was revised and improved to meet the guidelines of Law No. 14,133/2021, reflecting the modernization of bidding procedures in Brazil.

Finally, the practices described in this study can be replicated and improved by other UAPs throughout Brazil, especially by the air unit of the Military Police of Paraná, contributing to a better application of public resources and a more efficient and innovative administrative management.

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