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WHY DOESN’T HAIL PROTECTION IN SERBIA WORK?

Research with a case study
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Introduction

According to available data, the annual damage caused by hailstorms in Serbia in the past six years amounted to an average of 40 million euros. This does not mean that there are more hailstorms, but that the hail protection system of the Republic of Serbia is gradually collapsing. Media have for years reported on threats to this system, specifically insufficient funds for the purchase of rockets, suspicions of corruption in the rocket procurement process, inadequate quality control of the equipment and processes, registers and ways for using anti-hail rockets, as well as on problems in the functioning and maintenance of radar systems that date back to the 1970s.

The two issues which the public recognizes as the key reasons of the inefficiency of the hail protection system are the scarcity of anti-hail rockets and shooters who fire them into the hail clouds. The two issues have complex structural causes, which are still surrounded by a lot of unknown factors. This research is trying to contribute to the future resolution of the issues by presenting in one place the problems and systemic omissions in the hail protection efforts undertaken by the state, while analyzing the expediency of a specific case of anti-hail defense financing.

In the first part, readers will find out what hail protection is, who those in charge of implementing hail protection measures are, and the amount of damage the Republic of Serbia suffers as a result of hail. The second part presents and analyzes the most important problems preventing the functioning of the Serbian hail protection system. In the third part of this research, we have presented hail protection in the territory of the city of Loznica in 2014 and 2015. The presented case study is trying to demonstrate how all shortcomings in the system are reflected on the ground.

This study is a result of the work of the PRO-CURE group – a group of civil society organizations dedicated to the improvement of effectiveness in public revenue management. The PRO-CURE effectiveness assessment methodology, which is meant to be used by civil society organizations in improving the civil control of public procurement processes and budget expenditure, was applied in the case study. The objective of this control is to formulate relevant recommendations in order to help ensure:

- a more economical, efficient and effective expenditure from the budget, and
- the adoption of a strategy for the effective expenditure of budget funds, which would serve as a starting basis for the comprehensive management of the public procurement processes.
PART I

HAIL PROTECTION IN THE REPUBLIC OF SERBIA

The analysis of the economic effects of hail protection in Serbia in the period between 1972 and 2003 has established that each dinar invested in hail protection generated at least 14 times higher returns.¹

What is hail protection?

Hail protection is a set of measures that reduce or remove the detrimental effects of hail clouds on farm crops and other material goods. The hail protection system in the Republic of Serbia constitutes a part of a wider system of protection and rescue of people, material goods, cultural heritage and the environment from natural and other disasters. The hail protection system encompasses the following:

- Radar detection and monitoring of hail clouds,
- Determination of the level of danger from hail,
- Semination of hail clouds with special chemical reagents, and
- Determination of the efficiency of the applied methodology.

Hail cloud semination speeds up the removal of water from the clouds, making the accumulation of large quantities of dangerous precipitation less likely. Cloud semination takes place when silver iodide is dispersed throughout the cloud. Silver iodide is a reagent that stimulates precipitation from the clouds and prevents the formation of large hail stones. In the Republic of Serbia, clouds are primarily seminated by rockets of the appropriate range, which detonate and disperse the aforementioned chemical reagents through the clouds. The rockets are fired from anti-hail stations situated throughout the Republic of

Serbia. This type of hail protection is called active hail protection. According to research\(^2\), the efficiency of this type of protection is up to 70%.

The active approach is not universally used in hail protection. It is applied by only a number of countries, such as Hungary, Croatia, Moldova, Macedonia, Slovenia, Bulgaria, Romania, Russia and China. In most Western countries, the state lets farmers seek protection either by purchasing anti-hail nets or by insuring their farms. Lately in Serbia, calls have been heard for abandoning the existing system and replacing it by the Western model. However, one thing is certain, Serbia has had no serious professional or public debates where all the advantages, shortcomings and costs of the existing models would be thoroughly examined.

At this moment, the Republic of Serbia has the legal obligation to implement active hail protection measures and part of the taxpayers’ money is allocated for this purpose. In addition to this, legal and natural persons may implement other hail protection measures at their own expense, e.g. install anti-hail nets or insure their crops. Although farmers are encouraged to do this, the state, on its part, still guarantees that it will implement hail protection measures by seminrating hail clouds.

**Who is in charge of hail protection in Serbia?**

Active hail protection in the Republic of Serbia (without Kosovo and Metohija) is implemented on an area of 77,508 km\(^2\), out of which farmland stretches on 51,113 km\(^2\). The operative active anti-hail system is made up of a network of 13 radar centers with 1,613 active anti-hail stations.\(^3\) Serbia has an average of 110 days in which there is a danger from hail, and, on the average, active hail protection is applied during 60 days of this period.\(^4\)

The Republic Hydrometeorological Service of Serbia (RHMS) has been in charge of this field of activity since 1968, when the implementation of organized hail protection started in the Republic of Serbia. After the adoption of the Law on Emergency Situations in 2010, hail protection was included in the single


\(^3\) 2014 data

Why was hail protection transferred from the RHMS?

After the year 2004, when the then Law on Public Procurement took effect, numerous controversies and scandals overshadowed RHMS anti-hail rocket procurement activities. Notably, the advantage in the procurement of anti-hail rockets was given to the Poliester company, although without sufficiently clear criteria. The then RHMS deputy director said that, in addition to the rockets procured through “regular” purchase, the RHMS warehouse in Rekovac also received rockets the purchase of which had not been agreed on and which the Poliester company allegedly had nowhere to store. The stored rockets were later purchased and paid for from the state coffers. The Public Procurement Directorate pointed to this unlawfulness in 2010, describing it as a violation of Article 24, paragraph 1, item 4 of the 2008 Law on Public Procurement, because just one bidder had been asked to participate in the negotiation process, without the publication of a public call for bids.

In 2011, the Government transferred hail protection from the RHMS to the MoI Emergency Situations Sector. The transfer to the Serbian MoI brought hail protection in an unfavorable situation, especially in view of the Ministry’s restrictive financing of the Emergency Situations Sector, which struck another blow to Serbia’s hail protection. Especially disturbing are the claims of anonymous

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5 Law on Ministries Official Gazette of the RS No.16/11
6 Report of the Anti-Corruption Council No. 72 of September 16, 2010
7 Public Procurement Directorate, letter No. 404-02-594/10 of July 29, 2010
RHMS sources, who say that competent authorities had just one motive for this step – to interrupt an investigation ordered by the Higher Public Prosecutor’s Office in Belgrade\(^8\) and to cover up all irregularities observed in the previous period.\(^9\) To top it all off, the basis for the return of hail protection under the RHMS auspices in 2015 was not really clear, especially in view of the fact that just one month before the adoption of the new law, it had been unknown whether the competence would be transferred to the RHMS or to the Ministry of Agriculture.

**What is the amount of damage caused by hail in Serbia?**

According to estimates, the damage from hail in 2010 exceeded 100 million euros.\(^10\) However, the official data on hail damage cannot be accessed, nor are they quoted on the RHMS or Ministry of Agriculture websites or in their annual reports. The majority of data on hail damage are disclosed by the media, which mostly use their own sources on the ground. On September 13, 2013, the Tanjug news agency reported that in 2013, hail damage amounted to 45 million euros, which, according to the report, was double the amount registered in 2012. In May 2014, the estimated damage caused to just one town near Ivanjica amounted to between 10 and 15 million euros. In the following years, new damage worth millions of euros and striking examples of irresponsibility, bad organization and negligence were registered. For example, in 2015, the local government in Arilje allocated about 6 million RSD for the purchase of 192 rockets that were never distributed to anti-hail stations, because competent MoI persons had not trained shooters while waiting for the transfer of competences to the RHMS.\(^11\) This case of primarily administrative negligence, caused several million euros’ worth of damage to agriculture in Arilje. Damages were registered also in the area of Paračin,\(^12\) Valjevo, Smederevo, etc. Experts say that a proper assessment of hail damage is very difficult, because, in addition to destroyed crops, the evident damage from the loss of the market should also be included in the calculation. In late June 2016 in the largest part of Serbia, hail once again caused huge damage.

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8 Registered under the number KTR 1617/10
9 March 10, 2016 interview with an anonymous RHMS source
10 Online: [http://www.znanjenapoklon.rs/clanci/](http://www.znanjenapoklon.rs/clanci/)
12 Source: *Beta*, June 24, 2015
to raspberries, one of the most important Serbian export products. The damage was estimated to the amount of at least 40 million euros. Speaking of damage, the fact is frequently ignored that estimable economic damage from hail also includes huge existential and psychological damage suffered by the people who live in the areas affected by this type of precipitation and who depend on farming.

When PAKT asked the Ministry of Agriculture to send us the exact data on hail damage in the years 2014 and 2015, the Ministry told us they did not have them and added that a commission in charge of evaluating damage from natural disasters, appointed by the Serbian Government and headed by Deputy Prime Minister and Minister of Construction, Transport and Infrastructure Zorana Mihailović, had the requested data. Searching the Internet, we found out that the commission in charge of evaluating damage from natural disasters did not have its webpage, which made it impossible to find out its exact address. We eventually sent the request to Minister Mihailović’s office, and received a short answer, which arrived on July 1, 2016 and was registred under the number 06-00-00512/2016-02, which said the following:

“We have reviewed your Request for Free Access to Information of Public Importance sent to this Ministry on June 24, 2016, and in accordance with Article 16 of the Law on Free Access to Information of Public Importance, we are informing you of the following:

The Ministry of Construction, Transport and Infrastructure does not have information about the damage caused by hail in the territory of the Republic of Serbia in 2014 and 2015, so please refer to the Commission in charge of evaluating damage from natural disasters, 11 Nemanjina Street, Belgrade, in order to get the requested.”

However, the fact that the commission is within the Ministry of Construction, Transport and Infrastructure can also be seen from the fact that the only trace of its existence is at the official web presentation of the Ministry of Construction.

Another unknown is the amount set aside for the payment of damages to those farmers that do succeed in collecting the money. Only once all this expenditure is reviewed will one be able to make a good assessment of the effectiveness of the existing system.

13 Online: http://www.alo.rs/steta-na-malinjacima-40-million-euros/57000
14 Online: http://www.mgsi.gov.rs/cir/komisija-za-utvrdjivanje-stete-od-elementarnih-nepogoda
PART II

KEY ISSUES IN THE FINANCING OF HAIL PROTECTION IN THE REPUBLIC OF SERBIA

Insufficient funds are evidently an issue albeit not a justification, especially if we take into account the fact that the annual hail damage amounts to 40 million euros, and that efficient hail protection requires the maximum annual investment of 7 million euros for the purchase of rockets.

Shortage of anti-hail rockets

How to get money for anti-hail rockets??

We have had the opportunity for years between April and September to listen to media reports saying that the state simply does not have enough money to purchase a sufficient number of anti-hail rockets.\textsuperscript{15} Although the procurement of anti-hail rockets is in the sole jurisdiction of the Republic, local governments and citizens organize themselves, using their own money to illegally buy the lacking rockets.\textsuperscript{16} Over the last few years, competent institutions annually purchased about 6,000 anti-hail rockets, which, according to Emergency Situations Sector head Predrag Marić, is 9,000 rockets less than the hail defense minimum. According to the same source, the optimal number for achieving the hail protection effectiveness of 70% is 25,000 rockets.

Funding issues are evident, but they can under no circumstances serve as a justification, if we take into account the fact that the annual damage amounts


to 40 million euros, and that efficient hail defense requires an investment of maximum 7 million euros for the purchase of rockets.

Under the latest amendments to the Law on Ministries and the 2015 Law on Hail Defense, the competence for hail protection returned to the Serbian RHMS. Still, in spite of years of disastrous data on huge, several-million-euro damages caused by hail, the Serbian RHMS director in November 2015 said that the RHMS had 5,000 anti-hail rockets in stock, justifying the bad hail protection situation by the restrictiveness of the Serbian budget in the past few years. In 2016, the Serbian RHMS spent 65,940,000 RSD on the purchase of 2,650 anti-hail rockets, or by 250 less than in 2015. Therefore, the transfer of competence over hail protection and legal regulation of hail defense have not resulted in any improvements regarding funds available for this purpose.

<table>
<thead>
<tr>
<th>Overview of implemented procurement RHMS, 2016</th>
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<tbody>
<tr>
<td><strong>Hail rockets, No. 8/16</strong></td>
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<tr>
<td><strong>Budget allocations for hail protection</strong></td>
</tr>
<tr>
<td>66,500,000 RSD</td>
</tr>
<tr>
<td><strong>Contract awarded</strong></td>
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<tr>
<td>March 10, 2016</td>
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<tr>
<td><strong>Lot</strong></td>
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<tr>
<td>I</td>
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<td>II / III</td>
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<td><strong>Subject</strong></td>
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<td>AHR 8000m</td>
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<td>AHR 6000m</td>
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<tr>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>1200</td>
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<tr>
<td>1000 / 450</td>
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<tr>
<td><strong>Bidder</strong></td>
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<tr>
<td>Poliester doo, Priboj</td>
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<tr>
<td>Trayal-Hem / Poliester</td>
</tr>
<tr>
<td><strong>Contracted value</strong></td>
</tr>
<tr>
<td>33,480,000 RSD</td>
</tr>
<tr>
<td>22,290,000 / 10,170,000 RSD</td>
</tr>
<tr>
<td><strong>Contracted value per rocket</strong></td>
</tr>
<tr>
<td>27,900 RSD</td>
</tr>
<tr>
<td>22,290 RSD / 22,600 RSD</td>
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</tbody>
</table>

Serbia has not developed an argumented analysis that would evaluate and compare the costs, shortcomings and advantages of other solutions with the existing one. Proposed solutions do not appear to be sustainable. Stable sources of funds for the operation and development of the hail protection system cannot rely on the success of passive hail protection (insurance) at a time when small local farmers are experiencing a bad financial situation. If active hail protection is abandoned and replaced by insurance, the risk of hail damage will increase, which will in turn raise insurance costs. Only big landowners can benefit from this strategy because they can take loans and thus secure their production. It
is important to note that the state has decided to subsidize farmers who decide to insure their crops from hail with 40%, and that some local governments, e.g. Loznica, subsidize insurance policies with as much as 80%. At this point, it would be interesting to dwell on the fact that neither the state nor local governments report this expenditure as state assistance, which means that there is a legal dilemma: whether this type of subsidy, although it is granted to farmers (and represents the profit of insurance companies), should be treated as state assistance.

**Questionable quality of anti-hail rockets?**

It is important to stress that no relevant testing of rockets, their trajectories and actual ranges through the installing of signal emitters has ever been performed in Serbia. While we were working on this study, we obtained the information that the reagents’ composition and quantities of silver iodide (reagent which stimulates precipitation from the clouds) were also very debatable and depended on the producer. Namely, the Valjevo-based Krušik factory (military industry) has strict controls, unlike the other two Serbian factories.

Mixtures containing between 40% and 80% of silver iodide are used abroad, while rockets produced in Serbia contain just 8-13% of this reagent, despite the fact that the greater its concentration in a rocket, the greater the hail defense efficiency. Serbia needs a serious study, which would be conducted either by state authorities or an independent body and which would determine whether the purchased anti-hail rockets are efficient at all.

**Separate anti-hail rocket procurement procedures are a waste of money**

Centralized procurement procedures have been introduced for the purpose of ensuring more favorable prices in the procurement of large quantities. The current situation, illustrated by the attached case study, in which local governments call tenders for the purchase of anti-hail rockets at their own initiative, shows that a part of public revenues is wasted on separate procurement processes. Looking at the prices paid for the purchase of rockets to the same

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17 Interview with an anonymous source from the Economy Department of the City of Loznica of May 12, 2016
18 Published interview with an anonymous RHMS source of March 10, 2016
bidder in the same period by the Emergency Situation Sector and the city of Loznica, we can observe that the price per rocket was 5-10% lower where larger quantities were procured. If we add the Ministry information\(^\text{19}\) that local governments in 2014 procured 3,000 rockets and spent about 100 million RSD in the process, we can conclude that additional 150-300 anti-hail rockets could have been bought for the difference in price had the public procurement procedure been centralized. Every year, the Republic of Serbia allows the loss of up to 10% of the otherwise very scarce funds for hail protection through separate, legally undefined and ineffective procurement processes.\(^\text{20}\) If the procurement of anti-hail rockets were centralized and organized in several lots applying the geographic principle, money would be saved, and fair and equal participation of bidders would be ensured.

**Issue of shooter financing**

The second biggest problem in hail protection, after the insufficient number of anti-hail rockets, is the method of hiring and payment of hail rocket shooters. It has turned out that, under the applicable legal regulations, the Serbian MoI cannot pay shooters at anti-hail stations. The incomprehensible absence of a solution to this problem, which has been present for years, has resulted in general dissatisfaction and lack of organization in the system. According to an unwritten rule which was contrary to the then legal provisions but had the tacit approval of central authorities, local governments, acting in coordination with the Emergency Situation Sector, assumed the obligation to purchase hail protection and pay the shooters. The State Audit Institution repeatedly reacted to this practice in its observations and recommendations in audit reports.\(^\text{21}\)

Under the new legal solution, shooters’ monthly fees should increase to one-half of the minimum monthly wages in Serbia, which means that the total amount for 3,300 shooters from all local governments’ territories should be about 280 million RSD. Under the Law, 10% of the total crop and fruit insurance premiums (in 2014, about 100 million RSD) should be distributed so as to ensure that 70%

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\(^{19}\) Explanation of the Law on Hail Defense – Chapter IV – Evaluation of funds necessary for implementation of the Law

\(^{20}\) In 2014, about 88 million RSD were spent from the state budget for the purchase of 3,000 anti-hail rockets, while local governents spent about 100 million RSD from their budgets for the same number of rockets (the prices included VAT).

\(^{21}\) DRI Online: http://goo.gl/rSXWzJ
(about 70 million RSD) remain in the state budget to be used for the purchase of anti-hail rockets, and that 30% be distributed to local government budgets, to finance the work of anti-hail stations and shooters in their territories. A logical question can be asked, however: how will local governments find the lacking 250 million RSD, which is their imperative under the new Law, at the time of general restriction?

**Institutional framework issue**

The June 2015 Law on Hail Protection\(^22\) was expected to offer new and efficient solutions. Instead, the responsibility was once again shifted from the Emergency Situations Sector to the Serbian RHMS and, upon reading legal provisions, we could conclude that the legislator had been mostly interested in reducing expenditure from the central budget at the expense of local governments’ budgets. The legislator actually believes that the proposed legal solutions will improve hail protection and reduce the burden borne by the budget of the Republic of Serbia, which is absurd, to say the least. According to the legislator, the transfer of competence for anti-hail stations and shooters to local governments will reduce state costs by 135 million RSD. The awkward language used in the legal provisions even encourages local governments to continue buying rockets, while, on the other hand, the Ministry of Finance, in its opinion on the February 8, 2016 request of the Osečina municipality, clearly says that hail protection funds are secured from the Serbian budget.\(^23\) This law needs to be amended so as to resolve the existing legal issues and unambiguously to define competences in order to avoid any further avoidance of responsibility in the implementation of hail protection.

\(^{22}\) Law on Hail Defense, Official Gazette of the RS No. 54/2015

\(^{23}\) Online: http://www.tanjug.rs/full-view.aspx?izb=249398
All key issues of the currently non-functional hail protection in Serbia are clearly reflected if we observe individual cases. Therefore the performance analysis of hail protection financing, which, in the continuation of the text, analyzes the case of the City of Loznica in 2014 and 2015.

**Procurement of AH Rockets in 2014 and 2015 – the City of Loznica**

Acting without a legal basis, the City of Loznica in 2014 and 2015 purchased anti-hail (AH) rockets and paid shooters in order to defend its territory from hail. The procurement procedures were conducted by authorities that had nothing to do with hail protection. The procurement procedures conducted in this period were nearly always completed after the beginning of the hail protection season. The prices at which Loznica purchased rockets were higher than those paid by the central level for larger quantities. Although Loznica assumed the obligation to conduct this type of procurement procedures itself, the number of procured AH rockets was insufficient.

**The most important findings:**

**Developing the performance analysis of the AH rocket procurement for the City of Loznica in 2014 and 2015, we determined the following facts:**

1. The City of Loznica, as a local government unit, in 2014 and 2015, purchased anti-hail rockets without a legal basis. The implemented procurement process was in the competence of a central body.
2. The City of Loznica entrusted the procurement of anti-hail rockets to a legal person whose field of activity had nothing to do with hail protection.
3. The objectively needed quantity in 2014 was, in fact, double the estimated quantity.
4. The procurement procedures were financed from the generic auxiliary city budget lines entitled other activities.
5. Both in 2014 and in 2015, the procurement procedures took place two or three months after the beginning of the hail protection season.
6. The rockets were not taken over by the contracting authority, but by a representative of the Emergency Situations Sector, probably in order to “overcome” the issue of unlawful procurement of anti-hail rockets by the local government.
7. The City of Loznica carried out the purchase at a less favorable price than that paid at the same time by the MoI ESS in the procurement of a larger quantity of rockets.

1. Procurement of anti-hail rockets in 2014

*Procurement entrusted to an unrelated legal person*

Without a clear explanation, the local government entrusted the procurement of anti-hail rockets to the City Development Fund, a separate legal person founded by the City of Loznica. The City Development Fund has just one permanent employee – its director. The 2014 and 2015 anti-hail rocket procurement procedures were conducted by a six-member commission made up of employees of the Loznica City Administration, appointed by the Fund director.\(^\text{24}\)

*An insufficient number of rockets was procured*

The City of Loznica has 24 anti-hail stations in its territory, 20 of which are active.\(^\text{25}\) A total of 40 active shooters were on duty in them in the observed two years. Based on the information received from the City Development Fund, a conclusion can be made that the necessary quantities of anti-hail rockets in these two years were estimated in coordination with the Serbian MoI Emergency Situations Sector’s Valjevo Department and the Republic Hydrometeorological Service in Valjevo, which are in charge of the organization and operation of hail protection in the Kolubara and Mačva regions, as well as on the basis of Serbian MoI information on the necessary number of anti-hail rockets for the City of Loznica and the necessary minimum recommended by competent institutions, which is about 12 rockets per station.\(^\text{26}\) Despite these estimates, only a half of

\(^{24}\) Decisions on the establishment of the commission 84/2015 of July 24, 2015, 50/2015 of May 29, 2015 and 52/2014 of June 12, 2014

\(^{25}\) Four stations (Gučevo, Lozničko Polje, Brezjak and Tronoša) did not have shooters in 2014 and 2015

\(^{26}\) Interview with an anonymous source from the Loznica City Department of Economy of May 12, 2016
the required number of rockets was procured. Market research was conducted on the basis of available information on anti-hail rocket producers, and on the basis of experience of other local governments that also procured rockets.\textsuperscript{27}

\textit{Procurement was financed from the generic account in the budget}

The 2014 budget of the City of Loznica allocated 1,625,000 RSD (excluding VAT) for this purpose. The money for this purpose was secured from the city budget item 470 – \textit{other activities}, section 3, chapter 3.11, economic classification 426919. These categories in the budget leave room for discretion and make it possible not to observe plans where decisions on their expenditure are made.

\textit{Nabavka nije pokrenuta na vreme}

Prema planu javnih nabavki Fonda, koje je usvojen 16. januara 2014. godine, predviđeno je da se nabavka protivgradnih raketa pokrene u aprilu mesecu i da se istog meseca zaključi ugovor. Izvršenje ugovorenih obaveza planirano je za mesec maj. Sa stanovišta svarsishodnosti javne nabavke, ovde se već u prvom koraku uočava jasan problem. Sezona protivgradne zaštite kreće zvanično 15. aprila, dok je izvršenje ugovorene obaveze predviđeno za mesec maj. Da stvar bude još gora, direktor Fonda za razvoj Grada Loznice tek 12. juna donosi odluku o pokretanju nabavke, dakle, puna dva meseca nakon planiranog termina.\textsuperscript{28}

\textit{Procurement procedure did not begin in time}

According to the Fund’s Public Procurement Plan, adopted on January 16, 2014, the anti-hail rocket procurement procedure was to begin in April, when the contract was also to be concluded, while the execution of contractual obligations was planned for May. If we focus on the effectiveness of the public procurement process, a problem can clearly be observed from step one. The hail protection season officially begins on April 15, while the procurement plan envisioned the execution of contractual obligations in May. To make things even worse, the Lo-

\textsuperscript{27} Answer from the Loznica City Development Fund of March 23, 2016, No. 08-1/2016.

\textsuperscript{28} Na osnovu člana 39 i 53 Zakona o javnim nabavkama, direktor Fonda za razvoj Grada Loznice donosi Odluku o pokretanju postupka javne nabavke male vrednosti „Nabavka protivgradnih raketa” br. 1.1.5d/2014 u dve partije.
znica City Development Fund director made the decision that the procurement procedure begin as late as on June 12, i.e. two months after the planned date.\textsuperscript{29}

**Procurement price was higher than that in the central procurement process**

According to the tender documentation published on June 12, 2014, the contracting authority requisitioned 60 anti-hail rockets. The procurement was divided into two lots: in Lot 1, rockets with the range between 7,300 and 7,900 m (30 pieces) were requested, and in Lot 2, rockets with the range between 5,700 and 6,100 m (30 pieces) were requested. The estimated value of Lot 1 was 900,000 RSD excluding VAT, and that of Lot 2 was 2,725,000 RSD excluding VAT. The selected criterion of ranking and selection of the most favorable bid was the lowest offered price.

On the date when the procurement started, a decision to establish a commission in charge of this procedure was made. Eleven days later, on June 23, bids were opened. The commission made a record on the opening of bids, and a day later also a report on the expert evaluation of bids. In the final outcome, bids were presented by all producers of anti-hail rockets in the territory of the Republic of Serbia: Poliester from Priboj, Trayal from Kruševac and Krušik from Valjevo.

The contracting authority on July 3 concluded contracts with the companies Poliester Group d.o.o. from Priboj for Lot 1 at the amount of 870,000 RSD (29,000 RSD per rocket excluding VAT) and the Krušik AD Valjevo Holding Company for Lot 2 at the amount of 614,970 RSD (20,499 RSD per rocket excluding VAT).\textsuperscript{30} At the same time, the Serbian MoI Emergency Situations Sector (hereinafter referred to as MoI ESS), purchased 1,500 rockets at a lower price from the same supplier from Priboj.

\textsuperscript{29} Under Articles 39. and 53. of the Law on Public Procurement, the City of Loznica Development Fund director issues a decision on initiating the procurement of anti-hail rockets as a small value public procurement procedure No. 1.1.5d/2014 in two lots.

\textsuperscript{30} Contracts on the purchase of anti-hail rockets No. 59 and 60/2014 of July 03, 2014
Overview of the implemented small value procurement procedure – the City of Loznica, 2014 – the Procurement of Anti-Hail Rockets” No. 1.1.5d/2014

| Allocation from the budget for hail protection | 1,625,000 RSD excluding VAT |
| Decision on the initiation of the procedure | 12/06/2014 |
| Opening of bids | 23/06/2014 |
| Contract awarded | 03/07/2014 |

| Lot | I | II / III |
| Subject | AH rockets, range of 8000m | AH rockets, range of 6000m |
| Quantity | 30 rockets | 30 rockets |
| Estimated value | 900,000 RSD | 725,000 RSD |
| Estimated value per rocket | 30,000 RSD | 24,167 RSD |
| Bidder | „Poliester“ doo Priboj | „Krušik“ AD Valjevo |
| Contract value | 870,000 RSD | 614,970 RSD |
| Contract value per rocket | 29,000 RSD | 20,499 RSD |

In May of the same year, after the public procurement procedure, the Serbian MoI Emergency Situations Sector purchased 3,000 anti-hail rockets in two lots. For the sake of comparison, we are also providing a table with data from this procurement procedure so that the prices of the “wholesale” purchase (central level) and “retail” purchase (local government) can be compared.
Overview of the implemented procurement – MoI Emergency Situations Sector, 2014.

Anti-hail rockets

| Allocation from the budget for hail protection | 90,000,000 RSD VAT excluded |
| Contract awarded | 05.05.2014. |
| Lot | I | II / III |
| Subject | AHR 8000m | AHR 6000m |
| Quantity | 1500 | 1500 |
| Bidder | Poliester doo Priboj | Trayal Hem Kruševac |
| Contract value | 41,925,000 RSD | 32,850,000 RSD |
| Contract value per rocket | 27,950 RSD | 21,900 RSD |

Purchased goods are taken over by an ESS representative

It is interesting to note that both contracts in Article 3 paragraph 2 state that the „takeover of purchased goods will be carried out by the authorized representative of the MoI ESS and the Valjevo Hail Protection Department, in accordance with the decision of the Managing Board of the City Development Fund of Loznica“. In effect, the procurement envisions a rare and unusual case in which the contracting authority will not take over the procured goods personally. We assume that this represented an effort to keep at least a slight impression of legality of the implemented procedure.

2. Procurement of anti-hail rockets in 2015

Procurement on two occasions

In 2015, the City of Loznica increased its allocations for the procurement of hail protection and for that purpose set aside 2,990,000 RSD under the revision of the city budget. The Fund’s Public Procurement Plan was adopted on January 30, 2015, and amended on June 16, 2015, coinciding with the first revision of the local government budget. Originally, 1,500,000 RSD were planned for the purchase of anti-hail rockets and, under the amendments guided by the need to purchase new quantities of anti-hail rockets, another 1,490,000 RSD was added.
**Procurement pace was poorly planned again**

The original plan envisioned the initiation of the procedure in February and conclusion of the contract in March, but the realization of the contract was supposed to take place as late as in October. This looks unproductive at the first glance, but under Article 3 of all contracts concluded with suppliers in 2015 (June 16 and 19, and August 12) the sellers undertake the obligation to deliver rockets within maximum three days for urgency reasons. This shows that the procurement plan was developed unprofessionally and that there existed a chronic shortage of anti-hail rockets. Amendments to the plan, in which the purchase of additional quantities was planned, envisioned the initiation of the procedure in June, and the conclusion and realization of the contract in July. However, despite such odd time intervals, the framework dates of the procurement procedure were not observed, or, to put it more precisely, the procurement was late.

**Procurement results were the same as in 2014**

The first procurement in 2015 started with a May 29, 2015 decision No. 1/2015 on the initiation of proceedings, and a decision on the establishment of a commission. The six members of the commission remained the same as in the previous year. Likewise, the same bidders responded to the call for bids. In its report on the expert assessment of bids per lots, like in the previous year, the commission declares Poliester doo from Priboj the most favorable bidder for Lot 1 and Krušik from Valjevo the most favorable bidder for Lot 2. The only difference in comparison with 2014 is that on this occasion, the contracting authority in Lot 2 purchased 25 instead of 30 anti-hail rockets, with the range of up to 6,100 m. The procurement procedures were completed on June 16, 2015 and June 19, 2015, respectively, when contracts with the most favorable bidders were signed.

Only one month later, following the amendments to the Fund Procurement Plan, the Fund director on July 24 issued a new decision on initiating the small value public procurement procedure in Lots 1 and 2. We can say that the main players are already an „established team,” and on a more than a strange date, August 4, 2015, the commission files a report on the expert evaluation of bids, where the Poliester and Krušik companies once again appear as the most favorable bidders.
### Overview of the implemented small value procurement procedures –
the City of Loznica 2015

**Procurement of anti-hail rockets No. 1/15/2015**

**Procurement of anti-hail rockets No. 2/15/2015**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation from the budget for hail protection</td>
<td>2,990,000 RSD VAT excluded</td>
</tr>
<tr>
<td>Decision on the initiation of the procedure</td>
<td>July 29, 2015 / May 29, 2015</td>
</tr>
<tr>
<td>Opening of bids</td>
<td>August 04, 2015 / June 10, 2015</td>
</tr>
<tr>
<td>Contract awarded</td>
<td>August 12, 2015 / June 16, 2015</td>
</tr>
<tr>
<td>Lot</td>
<td>I</td>
</tr>
<tr>
<td>Subject</td>
<td>AHR 8000m</td>
</tr>
<tr>
<td>Quantity</td>
<td>30 / 30</td>
</tr>
<tr>
<td>Estimated value</td>
<td>870,000 RSD / 875,000 RSD</td>
</tr>
<tr>
<td>Estimated value per rocket</td>
<td>29,000 RSD / 29,167 RSD</td>
</tr>
<tr>
<td>Bidder</td>
<td>Poliester doo, Priboj</td>
</tr>
<tr>
<td>Contract value</td>
<td>870,000 RSD / 870,000 RSD</td>
</tr>
<tr>
<td>Contract value per rocket</td>
<td>29,000 RSD / 29,000 RSD</td>
</tr>
</tbody>
</table>

It is interesting to note, however, that one month later in the additional procurement, a difference in price appeared in Lot 2 procured from the Valjevo-based producer Krušik. On that occasion, the price of anti-hail rockets with the range of up to 6,100 m increased by 606 RSD per rocket in August against July. The same quantity of rockets as in the previous procurement – 25 – was purchased in this procedure. Even this piece of information itself points to the effects of ineffective planning, particularly where such procurement processes are implemented at the local government level.

**In the same year, MoI ESS procures anti-hail rockets at more favorable prices**

In 2015, the MoI ESS procured a total of 2,900 anti-hail rockets. Interestingly enough, the technical specifications of rockets procured in Lots 2 and 3 are identical, and the only difference is the caliber of the launch tube.
Suspicious relations between central authorities and anti-hail rocket suppliers

Initially, it was not clear why Krušik AD from Valjevo never competed at the tenders for larger quantities of anti-hail rockets organized by central authorities (MoI ESS in 2014, 2015 and RHMS in 2016). Instead, contracts were concluded with the company Trayal-Hem from Kruševac, whose prices offered to central authorities were higher than those that Krušik offered to local governments for a much lower number of the same anti-hail rockets. At our insistence, the company Krušik told us why their company, as the most favorable bidder, had never placed bids at tenders called by the MoI and RHMS in 2014, 2015 and 2016, stating the following:

„We hereby inform you that the Krušik Holding Corporation a.d. in 2014 and 2015 participated in public procurement procedures with the quantities and technical characteristics of anti-hail rockets which it had in stock, in accordance with its annual production of up to 300 pieces per year.

“Because of the size of its anti-hail rocket production, in the previous years Krušik was unable to participate in big centralized tenders for the needs of the RS MoI Emergency Situations Sector / RHMS, where large quantities of anti-hail rockets were requested; however, because of available quantities in stock, the company participated in tenders called by municipalities for the needs of anti-hail stations in their territories.
“Specifically, in 2014, Krušik participated as a bidder in several public procurement procedures, and concluded contracts and delivered anti-hail rockets for the needs of the municipalities of Krupanj, Sokobanja, Loznica, Bečej, Trstenik, Gadžin Han and Svrljig.

“In 2015 Krušik also participated as a bidder in several public procurement procedures, and concluded contracts with and delivered anti-hail rockets to the municipalities of Loznica, Valjevo, Krupanj, Bačka Palanka, Blace, Lajkovac, Ljubovija, Ub and Kuršumlija.

“In 2016, no new anti-hail rockets were produced, because our capacities were busy executing contracts, which means that this season Krušik has a small quantity of anti-hail rockets in stock, for which it will send its offer in accordance with available quantities and technical characteristics.

Sincerely yours,
Holding corporation KRUŠIK a.d. Valjevo
Sales Department

3. How did Loznica solve the issue of shooters in 2014 and 2015?

As for the regulation of the method of payment of hail rocket shooters and other issues in connection with the hail protection system in local communities, the terms of decisions and documents we could inspect only support the fact that local authorities are neither ready for nor capable of resolving the accumulated significant problems.

In 2014, the City of Loznica did not pay its shooters, while in 2015, according to the documentation we were able to get, it found the way to pay the shooters through temporary service agreements, which received the blessing of the Ministry of State Administration and Local Governance.\textsuperscript{31} In the same year, the City of Loznica also found the way to pay the shooters retroactively for the year 2014.

\textsuperscript{31} On the basis of the Commission's Conclusion for granting agreement to new hirings and additional work engagement with the users of public revenues of May 28, 2015, No. 51 :112-5731/2015-01 (according to the response of the City of Loznica Economy Department No. 91/2016-VII of March 17, 2016)
The first 2015 document which PAKT obtained using the Law on Access to Information of Public Importance is an agreement regulating the method of payment of shooters’ fees and other issues of May 29, 2015, the date when the hail protection season was already well underway. The agreement was signed by representative of hail rocket shooters Dragica Đokić from Trbušnica (station No. 95) and Loznica Mayor Vidoje Petrović. Under the agreement, the City of Loznica is required to hold a session of the City Assembly by June 20, 2015 and adopt a decision on the method of payment of shooters’ fees for the years 2014 and 2015, which will be carried out by June 30, 2015 at the latest. The fee for the period of engagement between April 15, 2014 and October 15, 2014 was also set to the amount of 23,000 RSD. Under the agreement, the fee for 2015 was harmonized with the average fees paid in the neighboring municipalities. Under the agreement, city and public enterprise officials are also required to assume competence for the repair of anti-hail stations and roads leading to the stations, and for the provision of legal support to shooters in the realization of the right to equal status regulated by law and agreement signed with the RHMS. On June 2, 2015, the City of Loznica received the commission’s conclusion granting agreement to newhirings and additional engagement of 44 hail rocket shooters hired under temporary service agreements by the beneficiaries of public revenues. The conclusion was signed by State Secretary at the Ministry of State Administration and Local Governance Ivan Bošnjak.

Although the local government received the competent Ministry’s agreement for the temporary employment of shooters in 2015, under the contracts signed with shooters which PAKT could inspect and in accordance with the May 29, 2015 Agreement on the Regulation of the Method of Payment of Fees to Shooters and Other Issues, shooters also retroactively received the net fee of 23,000 RSD for the work done in 2014, apparently without a solid legal basis.

In 2015, the gross amount of fees paid to the hail rocket shooters engaged in 2014 and 2015 under temporary service agreements amounted to 3,264,240.18 RSD. The payment was effected by the City Administration from the functional classification 130, economic classification 423 – contracted services.
Conclusion

One of the main obligations of each state is to find models for the protection of assets and lives of its citizens. For more than one decade, we have been registering political influence on the hail protection system, which has resulted in the collapse of the system and large-scale hail damages suffered mostly by farmers. This is why the political management of the system has to be abandoned and replaced by a research-based approach as soon as possible. In order to start establishing efficient hail defense mechanisms, Serbia sorely needs serious research studies on the efficiency of the existing defense methodology, testing of rockets, their trajectories, real ranges, composition of reagents and the necessary effective quantities of silver iodide. Only after the implementation of these analyses and professional and public debates that would clearly point to all advantages and shortcomings of the existing and possibly offered new models, should the existing law be amended. A responsible state must never put relevant legal solutions in this field below the need for restricting the budget, just the opposite. Only an efficient anti-hail system can make hail crop insurance more widely available and accessible to all farmers. Bearing in mind the cost-effectiveness of hail protection investments as opposed to the huge economic damage (up to 40 million euros annually) caused by hail, the state must unconditionally allocate sufficient funds for efficient hail defense. According to the current data, this amounts to about 7 million euros. In addition to funding, the law also has to resolve existing issues in connection with clear distribution of responsibilities and competences. There is not a single valid argument in favor of having local governments procure anti-hail rockets, in view of the economic and general effectiveness of such fragmented procurement processes. The authority in charge of hail protection should organize one centralized procurement procedure for anti-hail rockets in several lots, using the geographic principle, which will clearly save money and pave the way to fair and equal participation of all interested bidders. In addition to the aforementioned, this study also notes an urgent need for technical modernization, i.e. automatization of anti-hail stations and modernization of outdated radar systems.

Unfortunately, competent authorities in Serbia did not react appropriately to damages caused by hail in the past few years. The interests of Serbian citizens, farmers, insurance companies, hail rocket producers and the state itself must be properly balanced, using the existing experience which speaks in favor of research-based hail protection, alongside with the expedient and appropriate financial support of the state.
About the project “PRO-CURE: Strengthening Civil Scrutiny of Procurement Performance in the Security Sector”

The project aims to contribute to increased transparency and accountability of public procurement in the security sector by strengthening civil oversight. The specific objective of the project is to establish a framework for civil oversight of public procurement in the security sector. This framework is based on the methodology for assessing the public procurement performance, developed and tested by the PRO-CURE group of civil society organisations in consultation with relevant government stakeholders. Thereby the PRO-CURE group will also establish a channel for independent reporting on procurement procedures in the security sector, which will support the work of external oversight bodies.

The civil society organisations constituting the PRO-CURE group are: Belgrade Centre for Security Policy (project coordinator), Society against Corruption (project partner), Bečej Youth Association, Centre for Social Development (Kljajićevo), Info Centre (Brus), NIIT Center (Novi Sad/Niš), Podrinje Anti-Corruption Team (Loznica), PROTECTA (Niš) and Resource Center Majdanpek.

About Podrinje Anti-Corruption Team (PAKT)

Podrinjski Anti Corruption Team (PAKT) was established in 2014 in Loznica. It consists of lawyers and journalists. The organization occasionally hires about a dozen activists, and as many volunteers. PACT is a member of the Coalition for Oversight of Public Finances. Their activities include monitoring public procurement at the local level, state aid, the fight against corruption and advocacy for the civil budget and transparent public finances. Some of the projects that have been realized so far and in which they participated:

“Monitoring public procurement at the local level”, “Monitoring of state aid at the local level”, “Monitoring the work of public enterprises at the local level”, “Strengthening local transparency”, “Budget representation at work”, “Openly about Sports: Active youth for more transparent and responsible funding of sport in Republic of Serbia “ and the like.