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**C** Center for Civil Communications  
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## Index of Rationality

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## **1. GOALS AND METHODOLOGY**

The Centre for Civil Communications from Skopje is the only non-governmental organization in the Republic of Macedonia that implements direct and comprehensive monitoring of public procurement procedures organized in the country. With the aim of making an additional contribution to advancing the state-of-affairs in this field, the Centre initiated the development of so-called Index of Rationality in public spending. It aims to introduce a new instrument that will be used to assess effectiveness of public spending, to identify bottlenecks in the system and, ultimately, to contribute to institutions' cost-effective spending of budgets sustained by taxpayers.

The Index of Rationality is developed by means of comparison of prices under which different institutions have procured same products, services or works. In addition to enabling comparison of prices, the analysis of same type of products, services or works provides different patterns of behaviour on the part of state institutions as regards implementation of same type of public procurements.

The Index is envisaged to serve state institutions as an indicator against which they will improve the rationality in public procurements, i.e., public spending. Given that the index-included prices are the average value of those paid by the institutions and do not imply actual or market prices, state institutions should, whenever possible, pursue attainment of lowest prices and spend public funds in a more rational manner, moreover knowing that other institutions have attained more favourable prices for same type of procurements.

Differences in price paid by institutions for same types of products and services indicate the need for a thorough market research prior to tender announcement and harmonized approach on the part of contracting authorities when procuring same type of products.

The sample used to develop the Index includes all national and local level contracting authorities, i.e., from line ministries and municipalities, public enterprises and agencies, to schools and kindergartens.

Development of the Index of Rationality relies on primary and secondary data sources.

Data collection from primary sources is pursued by means of:

- attendance at public opening of bids submitted by economic operators under specific public procurement procedures, in order to obtain data on prices bided; and
- direct contacts with contracting authorities, in order to obtain data on the selection of the most favourable bid.

These activities enabled direct sources for data on prices under which certain products, services or works have been procured.

Secondary data sources include:

- Electronic Public Procurement System (EPPS); and
- Free Access to Information (FOI) applications.

It should be noted that the Index of Rationality will disclose the contracting authorities monitored, but not the companies with whom contracts have been signed (although data thereof is available), given that the responsibility for rational spending primarily lies with the contracting authorities.

## 2. INDEX OF RATIONALITY

The eighth Index of Rationality is developed for the following five types of products, i.e., services:

- **work clothing;**
- **work shoes;**
- **urban equipment – benches;**
- **toner cartridges; and**
- **disinfection, disinsection, and deratization services.**

This Index of Rationality was developed by targeting national and local level institutions that have procured these products or services in the course of 2012 and the first two months of 2013.

For the purpose of developing individual indices, relevant prices at which different products and services have been procured were secured by means of submitting 117 Freedom of Information (FOI) applications. Data collection was particularly difficult due to the fact that its timing overlapped with the local elections and a great number of local institutions did not function in full capacity during that period. In addition to frequent calls made to remind the institutions that they need to comply with the law-stipulated deadline of 30 days for disclosing the information requested, the Centre for Civil Communication, for the first time from the beginning of this process, had to send written urgencies to 13 institutions, wherein it announced lodging of appeals in front of the Commission for Protection of the Right to Free Access to Public Information should they fail to disclose the requested information .

Initially, the Index targeted 72 institutions at national and local level. However, due to objective and subjective reasons, which are duly specified under the relevant sections of this analysis, ultimately the Index was developed on the basis of price information for products, such as work clothing, work shoes, benches, toner cartridges, and services for disinfection, disinsection, and deratization, disclosed by 41 institutions.

## 2.1 Index of Rationality for Work Clothing

Relevant prices for procurement of work clothing as part of occupational safety and health equipment paid by public utility enterprises range from 1,263 to 4,956 MKD per set comprised of trousers and jacket. The ratio between the lowest and the highest price paid is as high as 1:3.92, which means that the highest price for work clothing, paid by the Inter-Municipal Public Enterprise “Proaqua” on behalf of its regional branch in Struga, is almost three times (292%) higher than the price paid by PE “Kamena Reka” from Makedonska Kamenica for similar workwear. In terms of the type of procurement procedures implemented, a major difference was identified in the eligibility criteria for bidding companies used by the two public enterprises that paid the lowest and the highest price for this procurement. In that, PE “Kamena Reka” did not define any eligibility criteria for participation in the tender procedure, while IMPE “Proaqua” requested the companies to demonstrate previous experience and provide an extensive list of references.

### **Index of Rationality for Work Clothing**

(price per 1 set of work clothing comprised of trousers and jacket)

<b>Contracting authority</b>	<b>Price in MKD (VAT included)</b>	<b>Difference against the average</b>
PE “Kamena Reka” – M. Kamenica	1,263	-46.84%
PE “Komunalec” – Bitola	1,539	-35.23%
PE “Communal Hygiene” - Bogdanci	1,570	-33.92%
PE “Stipion 2011” - Stip	1,692	-28.79%
PE “Solidarnost” - Vinica	1,820	-23.40%
PE “Strezevo” - Bitola	2,124	-10.61%
Average*	2,376	0.00%
PE “Komunalec” – Kriva Palanka	2,736	+15.15%
IMPE “Proaqua Water Supply” - Ohrid	3,682	+54.97%
IMPE “Proaqua Water Supply” - Struga	4,956	+108.59%

\*Average is calculated from the individual prices paid by the institutions included in the Index.

This Index of Rationality includes all public enterprises that have implemented procurement procedures for work clothing in the course of 2012 and the first two months of 2013.

We identified a total of 11 contracting authorities that have announced procurement calls for this type of products in the Electronic Public Procurement System (EPPS).

However, some public enterprises did not disclose the requested information. Namely, HS “Zletovica” – Probistip responded that the procurement price of workwear is not public information, which is in direct conflict with the Law on Free Access to Public Information. PE “Ohridski Komunalec” – Ohrid avoided disclosure of relevant information by continuously delaying the submission of its FOI response, while PE “Streets and Roads” - Skopje informed us that the relevant lot from the tender for procurement of occupational safety and health equipment had been annulled.

Therefore, the Index ranked only 8 institutions, where IMPE “Proaqua”, which organized one tender procedure divided into two parts, is included with two different prices as paid by its regional branches in Struga and in Ohrid.

As evident from the Index data for procurement of this product, great disparities were recorded among public enterprises. Namely, six contracting authorities paid prices lower than the average calculated, while three contracting authorities signed procurement contracts at prices that are higher than the average. The lowest price is by 46.84% lower than the average, while the highest price is by 108.59% higher than the average.

Great differences in price cannot be justified by the type of procurement procedure organized. All tender procedures included announcement of call for bids, which means procurements were implemented as transparent procedures. Furthermore, all tender procedures used “lowest price” as the selection criterion for the most favourable bid, and the final stage in the process implied organization of e-auctions in order to reduce the initially bided prices.

The only significant difference between the two institutions that paid the lowest and the highest price for procurement of work clothing was identified in the eligibility criteria defined for the bidding companies.

PE “Kamena Reka” organized a bid-collection procedure for small procurements whose value does not exceed 5,000 EUR, due to which, in compliance with the Law on Public Procurements, tender documents did not include eligibility criteria for bidding companies’ economic and financial, as well technical and professional ability to participate in the procurement procedure. On the other hand, IMPE “Proaqua”, which organized a large-scale open procurement procedure, required the bidding companies to submit their balance sheets and profit and loss statements for the last three years, as well as to demonstrate previous experience in the last three years by

submitting a list of references. However, tender documents did not specify the minimum threshold to be met by the companies which, of course, is a major shortfall in the procedure. In addition, tender documents published by the branch office in Struga required the companies to demonstrate that their products fulfil the general ISO Quality Standards and Norms, as well as standards and attestations specific to this type of procurements and applicable in the Republic of Macedonia.

This only confirms the problem related to definition of high eligibility criteria for tender participation, which is duly noted in the regular monitoring reports on the implementation of public procurements developed and published by the Centre for Civil Communications. Setting of disproportionately high eligibility criteria limits competition and favours the big companies.

In an attempt to examine the possible relation between price paid and quantity purchased, this Index provides an overview of relevant quantities purchased by individual public enterprises.

***Quantity purchased (work clothing)***

<b>Contracting authority</b>	<b>Quantity</b>	<b>Difference against the average</b>
PE :Kamena Reka" - M. Kamenica	25	-46.84%
PE "Komunalec" – Bitola	200	-35.23%
PE "Communal Hygiene" - Bogdanci	/	-33.92%
PE "Stipion 2011" - Stip	100	-28.79%
PE "Solidarnost" – Vinica	86	-23.40%
PE "Strezevo" – Bitola	/	-10.61%
PE "Komunalec" - Kriva Palanka	50	+15.15%
IMPE "Proaqua Water Supply" - Ohrid	76	+54.97%
IMPE "Proaqua Water Supply" - Struga	44	+108.59%

As shown in the table above, differences in price recorded under this Index cannot be justified with the quantity purchased, in particular because the institution that attained the lowest price did not procure the highest quantity.

## 2.2 Index of Rationality for Work Shoes

Relevant prices paid for procurement of work shoes (ankle-high, leather) range from 870 to 2,596 MKD. Under this Index of Rationality, the ratio between the lowest and the highest price is 1:2.98, which means that the highest price for work shoes as paid by the City of Skopje is by 198% higher than the lowest price recorded in the procurement procedure organized by PCE “Komunalec” – Prilep.

Some institutions purchased work shoes as part of larger procurements for occupational safety and health equipment intended for their employees, while others procured them as part of tenders for workwear, however, in both cases it is matter of ankle-high, leather shoes. According to data available from the EPPS, the City of Skopje, which paid the highest price, is the only institution that did not organize an e-auction as the final stage in the procurement procedure.

### **Index of Rationality for Work Shoes**

(price per pair of ankle-high, leather shoes)

<b>Contracting authority</b>	<b>Price in MKD (VAT included)</b>	<b>Difference against the average</b>
PCE “Komunalec” - Prilep	870	-40.08%
PCE “Water Supply” - Bitola	953	-34.37%
Municipality of Aerodrom	987	-32.02%
Factory for Equipment and Spare Parts “Novaci” Ltd. part of ELEM JSC	1,083	-25.41%
PCE Water Supply – Kocani	1,298	-10.61%
PE “Macedonia Road” - Skopje	1,383	-4.75%
<b>Average*</b>	<b>1,452</b>	
Institute of Hydrometeorology	2,446	+68.46%
City of Skopje	2,596	+78.79%

\*Average is calculated from the individual prices paid by the institutions included in the Index.

The Index of Rationality for work shoes was developed on the basis of relevant data from tender procedures organized by 8 contracting authorities in the course of 2012 and the first two months of 2013. Only the Factory for Maintenance, Overhaul and Transport “Oslomej” Ltd (also part of ELEM JSC) did not disclose the requested information.

As shown in the table above, the average price at which work shoes were purchased by the Index-targeted institutions is 1,452 MKD. In that, six institutions procured this item at prices lower than the average (ranging from 870 to 1,383 MKD), whereas two

institutions paid considerably higher prices that amounted to 2,446 and 2,596 MKD, respectively. Taking into account the fact that all institutions procured ankle-high, leather shoes, it appears that the Public Communal Enterprise from Prilep purchased as many as 3 pairs of shoes for the price paid by the City of Skopje for one pair.

Great differences in price cannot be explained either by the public procurement procedure applied or by the criteria used for selection of the most favourable bid.

Most of the contracting authorities, those being: PCE “Komunalec” - Prilep, PCE “Water Supply” - Bitola, Municipality of Aerodrom and the City of Skopje, organized bid-collection procedures with previously announced call for bids for procurements whose value exceeds 5,000 EUR. Factory “Novaci”, which is part of ELEM JSC Skopje, PCE “Water Supply” – Kocani and PE “Macedonia Road” – Skopje applied the open procedure, while the Institute of Hydrometeorology organized a bid-collection procedure for small procurements whose value does not exceed 5,000 EUR.

It should be noted that the contracting authorities that paid the highest and the lowest price for work shoes used "lowest price" as the selection criterion for the most favourable bid.

Only three from the total of eight Index-targeted institutions (Factory “Novaci” Ltd as part of ELEM JSC, PCE “Water Supply” - Kocani and PE “Macedonia Road” - Skopje) used "economically most favourable bid" as the selection criterion, where Factory “Novaci” assigned 70 points to the price element and 30 points to the quality element. PE “Water Supply” - Kocani, in addition to assigning 60 points to the price element, also evaluated the quality of bids to which it assigned 40 points. PE “Macedonia Road” - Skopje assigned 80 points to the price element and 20 points to the payment deadline.

Therefore, obvious is that price discrepancies cannot be attributed to the type of procurement procedure organized or the selection criterion used, because all procurements were organized as open and public procedures and the public enterprises that performed bid-ranking, which in addition to the price element assigned relevant points to other elements, did not attain the highest prices. It should be noted that only one tender procedure, organized by the City of Skopje, which resulted in the highest price paid for work shoes, did not anticipate an e-auction as the final stage in the procedure, whereas all other contracting authorities organized e-auctions.

Quantity of shoes being purchased, as shown in the table below, can only partially justify the differences in price attained by the contracting authorities.

***Quantity procured (work shoes)***

<b>Contracting authority</b>	<b>Quantity</b>	<b>Difference against the average</b>
PCE "Komunalec" - Prilep	374	-40.08%
PCE "Water Supply" - Bitola	99	-34.37%
Municipality of Aerodrom	100	-32.02%
Factory for Equipment and Spare Parts "Novaci" Ltd.	172	-25.41%
PCE "Water Supply" - Kocani	/	-10.61%
PE "Macedonia Road" - Skopje	770	-4.75%
Institute of Hydrometeorology	/	+68.46%
City of Skopje	2	+78.79%

Indeed, the City of Skopje, which paid the highest price, procured the lowest quantity of shoes, but it should be stressed that the tender procedure was not organized solely for work shoes, as it concerned procurement of workwear (suits) and footwear for employees, divided into two separate lots: one intended for employees in the City of Skopje (drivers, catering staff, maintenance and repair staff and general workers), and the second intended for public hygiene workers in the City of Skopje and the municipalities within the City of Skopje.

Deviation from sound economic logics whereby procurement of higher quantity implies lower prices is best represented by the tender procedure organized by PE "Macedonia Road" - Skopje which, by far, procured the highest quantity of shoes, but did not attain the lowest price.

## 2.3 Index of Rationality for Urban Equipment – Benches

As regards procurement of benches, made of wood with metal structure and of standard dimensions, significant differences were noted in prices paid by the municipalities, which range from 4,838 to 12,188 MKD. The ratio between the lowest and the highest price paid is as high as 1:2.52, which means that the highest price is by 152% higher than the lowest price. These differences in price would have been even greater if the Index also included urban equipment procurements (benches) manufactured from different materials and of different dimensions, particularly knowing that some municipalities have paid as much as 30,000 MKD and more per bench made of fiber-board, wood and/or metal, and of different dimensions. In order to arrive to as objective comparison as possible, the Index was developed only for the municipalities that procured benches of standard dimensions and made from standard materials (wood/metal).

This Index explicitly shows that rationality in public spending cannot be achieved only by formal application of the rules governing public procurements. Namely, the lowest price recorded under this Index was attained in the tender procedure organized by the Municipality of Gjorce Petrov as an open procedure, but without e-auction due to the fact that the contracting authority received only one bid. On the contrary, the Municipality of Makedonska Kamenica organized an e-auction as part of its procurement procedure, but attained the highest price.

### **Index of Rationality for Benches** (price per bench made of wood/metal)

<b>Contracting authority</b>	<b>Price in MKD (VAT included)</b>	<b>Difference against the average</b>
Municipality of Gjorce Petrov	4,838	-44.46%
Municipality of Aerodrom	6,647	-23.69%
Average*	8,711	0.00%
Municipality of Prilep	9,735	+11.76%
Municipality of Kisela Voda	10,148	+16.50%
Municipality of Makedonska Kamenica	12,188	+39.92%

\*Average is calculated from the individual prices paid by the institutions included in the Index.

FOI applications requesting information about individual prices paid for procurement of benches were addressed to 14 contracting authorities. Nevertheless, the Index

was developed only for five contracting authorities, because of the inability to compare procurement data provided by all institutions, which was a result of differences in manufacturing materials used or benches' dimensions (contracting authorities excluded from the Index on this ground include the Municipality of Karpos, Municipality of Kavadarci, Municipality of Kriva Palanka, Municipality of Negotino, Regional Development Centre for the Vardar Region and PCE "Komunalec" - Strumica). The Municipality of Veles announced, but did not disclose the requested information, the Municipality of Ilinden classified these data as business secret, while the Municipality of Gazi Baba signed a framework contract with three economic operators, which would later participate in e-auction prior to actual procurement of benches.

As shown in the table above, prices in this Index range from 4,838 to 12,188 MKD. The average price calculated for procurement of benches amounts to 8,711 MKD. Two municipalities purchased benches at prices lower than the average, while three municipalities procured them at considerably higher prices. These differences cannot be explained by the procurement procedure applied, because all municipalities organized procurement procedures with previously announced call for bids, as follows: Gjorce Petrov, Aerodrom, Kisela Voda and Makedonska Kamenica organized open procedures, and only the Municipality of Prilep organized a bid-collection procedure. All five municipalities used "lowest price" as selection criterion for the most favourable bid. Only the Municipalities of Gjorce Petrov and Kisela Voda did not organize e-auctions. This provides evidence in support of the fact that even this instrument intended to increase rationality of public spending does not necessarily yield results. Namely, the municipality that paid the lowest price did not organize an e-auction, while the municipality (Makedonska Kamenica) that paid the highest price organized a downward bidding, i.e. e-auction.

**Quantity procured (benches)**

<b>Contracting authority</b>	<b>Quantity</b>	<b>Difference against the average</b>
Municipality of Gjorce Petrov	140	-44.46%
Municipality of Aerodrom	120	-23.69%
Municipality of Prilep	40	+11.76%
Municipality of Kisela Voda	120	+16.50%
Municipality of Makedonska Kamenica	18	+39.92%

In terms of the quantity purchased, data presented in the table above show great differences in price on the basis of quantity purchased, as the Municipality of Gjorce Petrov, which procured the highest quantity (140 benches), attained the lowest price, while the Municipality of Makedonska Kamenica, which procured the lowest quantity (18 benches), attained the highest price. However, the fact that the Municipalities of Aerodrom and Kisela Voda procured the same quantity, but attained higher prices, indicates the fact that differences in price recorded under this Index are not a result of procurement's total value.

## **2.4 Index of Rationality for Toner Cartridges**

*The Index of Rationality for toner cartridges shows significant differences in price paid for procurement of these office supplies. In that, prices attained by contracting authorities for procurement of original toner cartridges range from 3,622 to 4,552 MKD, indicating price differences of up to one quarter, while in the case of the so-called compatible toner cartridges, differences in price are greater and go as high as 100%, while the prices range from 998 to 2,006 MKD per cartridge.*

*On the basis of prices attained by the contracting authorities, a conclusion is inferred that implementation of public procurements did not result in prices that would be significantly lower than market prices.*

*Otherwise, the Index of Rationality for toner cartridges was developed for two types of cartridges intended for the most common brand of printers "Hewlett Packard" (HP). Hence, two indices were developed: one for the original toner cartridges, in particular P1100; P1005/100 and 1522nf, and the second for compatible toner cartridges, in particular 1010; 1018; 1020; 1100 and 3030.*

*For the purpose of developing this Index, FOI applications were addressed to state agencies inquiring about the prices at which they purchased toner cartridges. From the total of 23 agencies registered as contracting authorities in the EPPS, only 11 were included in this Index because the remaining agencies either responded that they did not use the said toner cartridges or, despite the FOI applications and our reminders, did not disclose the requested information. Agency for Promotion and Development of Agriculture, Agency for Promotion and Support for Tourism - Struga and Food and Veterinary Agency did not comply with their obligation stipulated in the Law on Free Access to Public Information.*

### 2.4.1. Index of Rationality for Original Toner Cartridges

The ratio between the lowest and the highest price paid is 1:1.26, which means that the highest price is by 26% higher than the lowest price. The average price at which the agencies procured original toner cartridges amounts to 4,076 MKD and it is in the rank of high market price for this commodity.

#### **Index of Rationality for Original Toner Cartridges**

(price per 1 HP original toner cartridge P1100; P1005/100 and 1522nf)

<b>Contracting authority</b>	<b>Price in MKD (VAT included)</b>	<b>Difference against the average</b>
Insurance Supervision Agency	3,622	-11.14%
Agency for State Roads	3,945	-3.21%
Average*	4,076	0.00%
Agency for Youth and Sports	4,130	+1.32%
Railway Regulatory Agency	4,130	+1.32%
Administration Agency	4,552	+11.68%

\*Average is calculated from the individual prices paid by the institutions included in the Index.

In terms of the type of procurement procedure applied, the Insurance Supervision Agency, which paid the lowest price, purchased toner cartridges together with photovoltaic cells by means of a bid-collection procedure for small procurements. On the contrary, the Administration Agency, which paid the highest price for toner cartridges, organized a non-transparent negotiation procedure without previously announced call for bids. This provides the conclusion that differences in price attained for procurement of original cartridges could be justified by the type of procurement procedure. Namely, the negotiation procedure without previously announced call for bids implies engagement in direct contracts with one company and is not conducive to competition among companies.

**Quantity procured (original toner cartridges)**

*(HP original toner cartridge P1100; P1005/100 and 1522nf)*

<b>Contracting authority</b>	<b>Quantity</b>	<b>Difference against the average</b>
Insurance Supervision Agency	5	-11.14%
Agency for State Roads	1	-3.21%
Agency for Youth and Sports	1	+1.32%
Railway Regulatory Agency	5	+1.32%
Administration Agency	33	+11.68%

As shown in the table above, the Administrative Agency, which paid a price that is by approximately 12% higher than the average, procured the highest quantity of toner cartridges, which is contrary to the economic logic whereby procurement of higher quantity can result in lower price.

## 2.4.2. Index of Rationality for Compatible Toner Cartridges

*Differences in price for procurement of compatible toner cartridges are more prominent than those recorded in the case of original toner cartridges. In that, the ratio between the lowest and the highest price is 1:2, which means that the highest price paid by the Agency for Foreign Investments is twice as high as the lowest price paid by the Civil Aviation Agency.*

### **Index of Rationality for Compatible Toner Cartridges**

*(price per 1 HP compatible toner cartridge 1010; 1018; 1020; 1100 and 3030)*

<b>Contracting authority</b>	<b>Price in MKD (VAT included)</b>	<b>Difference against the average</b>
Civil Aviation Agency	998	-22.58%
Agency for Spatial Planning	1,002	-22.27%
Emigration Agency	1,106	-14.20%
Agency for Commodity Reserves	1,204	-6.59%
Average*	1,289	0.00%
Agency for Management of Seized Property	1,416	+9.85%
Agency for Foreign Investments	2,006	+55.62%

\*Average is calculated from the individual prices paid by the institutions included in the Index.

Four from the total of six agencies whose procurement data were used to develop this Index attained prices lower than the average in the range from 6.59% to 22.58%, while two of them attained prices that are by 9.85% and 55.62%, respectively, higher than the average.

In that, it should be noted that this Index includes data provided by the Agency for Commodity Reserves, although it claimed that toner cartridges procured are original, as well as the Agency for Promotion of Foreign Investments and Export, which stated that it uses reconstructed toner cartridges. Notably, an original HP toner cartridge cannot be sold at a low price of 1,204 MKD, while reconstructed cartridges cannot cost as much as 2,006 MKD.

Differences in price attained cannot be explained by the type of procurement procedure applied, because the two agencies that procured toner cartridges at the lowest and the highest price, i.e., the Civil Aviation Agency and the Agency for Foreign Investments, organized the same type of procedure: bid-collection procedure with previously announced call for bids. The only difference between

these two procedures that may be relevant for our analysis is the criterion used for selection of the most favourable bid. The Civil Aviation Agency used the criterion “lowest price”, while the Agency for Foreign Investments, taking into account the fact that it procured toner cartridges together with spare parts for IT equipment, used the criterion “economically most favourable bid”, which included the following bid-evaluation elements: price was assigned 40 points; price for peripherals, spare parts and network was assigned 30 points; and price per labour hour for installation of peripherals, spare parts and network was assigned 30 points. These are all elements that have no relevance to toner cartridges in terms of selection of the most favourable bid, and logically, their price was not assigned any weight in this tender procedure. Therefore, a new, downward-revised price was not offered during the e-auction organized in the final stage (although it was assigned a maximum of 40 points).

The quantity procured, as shown in the table below, does not justify the difference in price as well. Although the Agency for Foreign Investments did not disclose information on the quantity of toner cartridges procured, data provided by other agencies provide a clear conclusion that the quantity being procured was of no relevance to the price attained.

***Quantity procured (compatible toner cartridges)***

(HP toner cartridge 1010; 1018; 1100 and 3030)

<b>Contracting authority</b>	<b>Quantity</b>	<b>Difference against the average</b>
Civil Aviation Agency	2	-22.58%
Agency for Spatial Planning	3	-22.27%
Emigration Agency	7	-14.20%
Agency for Commodity Reserves	1	-6.59%
Agency for Management of Seized Property	12	+9.85%
Agency for Foreign Investments	/	+55.62%

Namely, available data indicate the fact that the Agency for Management of Seized Property, which attained a price higher than the average, procured the highest quantity, while the Civil Aviation Agency attained the lowest price although it procured only 2 toner cartridges of the specified type.

## 2.5 Index of rationality for Disinfection, Disinsection, and Deratization Services

Prices attained by different contracting authorities for procurement of disinfection, disinsection, and deratization services range from 3,000 to 9,310 MKD per 1,000 m<sup>2</sup>. The ratio between the lowest and the highest price paid is 1:3.10, which means that the Agency for State Roads paid a price for disinfection, disinsection, and deratization services per 1000 m<sup>2</sup> that is by 210% higher than the price paid by the Student Dormitory “Orde Copela” in Prilep. Differences in price cannot be explained by the type of procurement procedure applied, because all contracting authorities organized bid-collection procedures for small procurements and used “lowest price” as the selection criterion.

### **Index of rationality for disinfection, disinsection, and deratization services**

(price of service per 1,000 m<sup>2</sup>)

Contracting authority	Price in MKD, (VAT included)	Difference against the average
Student Dormitory “Orde Copela” Prilep	3,000	-50.54%
Agency for Real Estate Cadastre	4,650	-23.33%
Public Care Institute for Children with Educational and Social Problems - Skopje	4,800	-20.86%
Care Centre for Infants and Toddlers - Bitola	4,846	-20.10%
Health Care Centre - Skopje	6,000	-1.07%
Average*	6,065	0.00%
State Student Dormitory “Mirka Ginova”	6,296	+3.81%
Kindergarten “Majski Cvet”	6,731	+10.98%
Parliament of the Republic of Macedonia	7,100	+17.06%
Kindergarten “Estreja Ovadija-Mara” - Bitola	7,920	+30.58%
Agency for State Roads	9,310	+53.50%

\*Average is calculated from the individual prices paid by the institutions included in the Index

Initially, this Index targeted all contracting authorities that have published call for bids for procurement of disinfection, disinsection, and deratization services in the period September 2012 - February 2013. However, the Index includes only 10 from the total of 15 contracting authorities that were addressed with FOI applications inquiring about the price attained for these services. In that, the Department for General and Common Matters at the Government of the Republic of Macedonia did not provide a unified price of service, but a scale pricing method that depends on the surface area covered with the said service where the prices range from 16.2 MKD per 1 m<sup>2</sup> for

premises up to 50 m<sup>2</sup> to 7.6 MKD per 1 m<sup>2</sup> for premises whose surface area exceeds 700 m<sup>2</sup>. The Public Institution for Common Matters of Public Health Care Institutions, University Clinics - Institute and Emergency Centre – Skopje disclosed the information requested, but they were not conducive to deduction and calculation of the average price per square meter. PE “Water Supply and Sewage” provided a FOI response wherein it indicated the individual prices paid by more than 50 local offices and administrative buildings, which further complicated the calculation of an average price.

At the time this Index was developed, the Agency for Commodity Reserves had still not signed the contract pending the approval from the State Commission for Prevention of Corruption to continue the already initiated tender procedure, in particular due to the fact that campaign activities for the local elections had already started in the said period. Only PHI Clinic for Infectious Diseases and Febrile Conditions – Skopje did not disclose the information requested.

As shown in the table below, prices attained by different contracting authorities included in the Index and related to procurement of disinfection, disinsection, and deratization services per 1,000 m<sup>2</sup> range from 3,000 to 9,310 MKD. In that, some institutions attained prices that are by more than 50% higher than the average. However, it should be stressed that it is a matter of services that all institutions use at least twice per year.

Differences in price recorded under this Index cannot be explained by the type of procurement procedure organized. Namely, all Index-targeted institutions organized bid-collection procedures for small procurements whose value does not exceed 5,000 EUR with previously announced call for bids and included e-auctions as the final stage in the process.

All tender procedures used “lowest price” as the selection criterion for the most favourable bid. Contrary to common logics, the tender procedure organized by the Student Dormitory “Orde Copela” in Prilep, which attained the lowest price, did not include an e-auction due to the fact that only one bid was obtained from the PHI Public Health Centre – Prilep, while the tender procedure organized by the Agency for State Roads, which attained the highest price, included an e-auction in the final stage.

As shown in the table below, major differences in price cannot be justified also by the size (surface area) of premises for which these services were procured.

**Surface area of premises being maintained**

<b>Contracting authority</b>	<b>Surface area in m<sup>2</sup></b>	<b>Difference against the average</b>
Student Dormitory "Orde Copela" Prilep	7,500	-50.54%
Agency for Real Estate Cadastre	/	-23.33%
Public Care Institute for Children with Educational and Social Problems - Skopje	2,500	-20.86%
Care Centre for Infants and Toddlers - Bitola	2,043	-20.10%
Health Care Centre - Skopje	10,000	-1.07%
State Student Dormitory "Mirka Ginova"	3,924	+3.81%
Kindergarten "Majski Cvet"	3,389	+10.98%
Parliament of the Republic of Macedonia	/	+17.06%
Kindergarten Estreja Ovadija-Mara Bitola	4,341	+30.58%
Agency for State Roads	2,899	+53.50%

It should be noted that the Health Care Centre – Skopje, which procured disinfection, disinsection, and deratization services for the greatest surface area (10,000 m<sup>2</sup>) did not attain the lowest price. At the same time, the Public Care Institute for Children with Educational and Social Problems – Skopje, whose premises were the smallest, attained a price that is by 20% lower than the average.

### 3. GENERAL CONCLUSION

Great differences in price were noted in this Index of Rationality developed for a new group of products (work clothing, work shoes, benches, toner cartridges) and services (disinfection, disinsection, and deratization). The biggest difference in price was recorded in relation to procurement of work clothing, where one public enterprise (IMPE "Proaqua") purchased them at a price that is three times more expensive than prices attained by other contracting authorities. The lowest difference in price (by 26%) was recorded in relation to procurement of original toner cartridges. To summarize, the Index of Rationality provides the following conclusions:

- for procurement of **work clothing** as part of occupational safety and health equipment, the communal enterprises attained prices that range from 1,263 to 4,956 MKD per set, where the highest price paid is by 292% higher than the lowest price registered;
- contracting authorities purchased **work shoes** (ankle-high, leather) at prices that range from 870 to 2,596 MKD, where the highest price paid is by 198% higher than the lowest price;
- **prices of benches** procured by the municipalities range from 4,838 to 12,188 MKD, where the highest price paid is by 152% higher than the lowest price registered in the Index;
- original **toner cartridges** were purchased at prices that range from 3,622 to 4,552 MKD, indicating price differences of up to one quarter, while prices of compatible toner cartridges demonstrated even greater differences going up to 100% given that prices attained by individual contracting authorities range from 998 to 2,006 MKD;
- Index-targeted institutions procured **disinfection, disinsection, and deratization services** at prices ranging from 3,000 to 9,310 MKD per 1,000 m<sup>2</sup>. The highest price is by 210% higher than the lowest price registered in the Index.

Differences in price recorded under this Index could not be justified by the type of procurement procedure organized, notably because all procurements were organized as open procedure or bid-collection procedure. No differences were recorded in regard to specifications of products and services that are subject of

analysis, in particular because special attention was paid to compare products of same composition, dimensions, etc. At the same time, “lowest price” was dominantly used as the selection criterion for the most favourable bid. Moreover, these differences could not be explained by the use of e-auctions, because cases were recorded (procurement of urban equipment - benches) where although the procurement procedure was concluded with downward bidding of prices, it resulted in attainment of the highest price, while the lowest price registered under the relevant index was attained in a procedure that did not include an e-auction. Development of this Index of Rationality also included an analysis of relevant quantities being purchased, however, it was concluded that the quantity of specific products or services did not affect the final price attained. On the account of the above-indicated, the conclusion is inferred that formal application of public procurement procedures does not yield results, i.e., obtaining the best value for the money and achieving the desired rationality in public spending. Notably, absence of formal and objective justifications for major differences in price recorded under the Index of Rationality indicates that reasons thereof should be sought in other factors that are subjective in nature. In that, the sources of such subjective and non-market factors can be identified with both parties involved in the procurement procedures, i.e., contracting authorities and bidding companies. As regards the institutions, they must change their attitude towards public procurements in order to perceive them as a means of obtaining the best value for the money, rather than just as means for demonstrating formal compliance with law-stipulated obligations. Furthermore, it is of paramount importance for contracting authorities to employ maximum prudence when developing tender documents and technical specifications. Namely, by means of defining eligibility criteria for tender participation and developing technical specification, contracting authorities are obliged to encourage greater competition among the companies. However, the selection process should be focused on the best bid and not on the best bidder, while eligibility criteria should be developed in a manner that would enable open and fair competition among all companies operating in the relevant field of procurement and should pursue the ultimate goal of selecting the bid that provides the best value for the money spent. Only in such case a conclusion can be inferred that public money has been spent in responsible, economical and rational manner. As regards the companies, great differences in price at which companies sell their products and services to various institutions

provide two general conclusions. First, it appears that in some cases certain companies are being favoured as the best bidder. Second, there are indications for possible market-sharing agreements among companies.