# PUBLIC PROCUREMENT OF POSTAL SERVICES IN CONDITIONS OF MARKET LIBERALIZATION

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**Summary:** The liberalization of the postal services market includes the obligation to implement the public procurement of postal services. This enables adequate market competition for bodies subjected to the Directive on public procurement. Because of mutually incomparable factors that affect the realization of services, proposed research presents a comprehensive analysis of the application of multi-criteria analysis and AHP method in public procurement, when selecting the most economically advantageous tender. The main problem that occurs is the choice of relevant criteria and related subcriteria that have more or less impact on the postal services provider.

**Keywords:** *postal services, public procurement, AHP method, most economically advantageous tender* 

### 1. Introduction

Determination and application of criteria for the selection of tenders are preliminary actions of a successful result of the procurement procedure. In the public procurement procedures, contracting authority may choose for one of the two criteria when selecting tender: lowest price (as the sole criteria) or the most economically advantageous tender (MEAT). If the contracting authority applies lowest price criteria in procurement procedures, then the price is the only factor to be taken into consideration for tenderers evaluation. Comparing statistical indicators, especially the share of the most economically advantageous tender criterion in Croatia, in the period of 2010 - 2014, this criterion had insignificant share (0.68 - 1.43%) in the total number of public procurement contracts awarded. That is in contrast with the practice of most EU Member States where application of lowest price criterion is an exception.

When applying most economically advantageous tender, contracting authority takes into account various criteria related to the subject of the procurement: quality, price, technical merits, functional characteristics, environmental characteristics, running costs, cost-effectiveness, after-sales service and technical assistance, delivery date and period of performance. By selecting the most economically advantageous tender, contracting authority has to specify in tendering documents the relative weighting given to each of the determined criteria. Selection criteria cannot be discriminatory and should be linked to the subject of procurement.

The paper describes the possibility of applying Saaty scale and AHP method in the public procurement of postal services, by applying most economically advantageous tender.

#### 2. Public procurement of postal services in conditions of market liberalization

Provision of postal services in the Republic of Croatia is regulated by the Postal Services Act and by the Ordinance on the provision of universal postal service, as well as general conditions of the postal service providers. Postal Services Act abolished the exclusive rights guaranteed by the public postal operator, Croatian Post. Conditions for ensuring a satisfactory level of universal service for all users were set, as well as the establishment of harmonized principles of regulation in the conditions of complete liberalization of the postal services market.

The liberalization of the postal services market for subjects of the Public Procurement Act meant the obligation to conduct public procurement of postal services, while ensuring adequate competition. In the context of the adequate application of the Public Procurement Act for the supply of postal services, legal basis no longer exists for the selection of a negotiated procedure without prior publication, and contracting authorities must take this into account when choosing a procurement procedure.

Contracting bodies in public procurement procedures of postal services should define procurement subject as "postal services", and the description of the procurement should be clear, complete and unambiguous and in line with Postal Services Act. Bidders clearly have to know whether subject of the tender is a universal service, interchangeable postal services or other postal services. Although contracting bodies do not have to strictly follow terminology, description of the procurement should contain sufficient elements for the bidders to knew what service is the subject of the procurement, and the important conditions for the contracting body of postal services (frequency of delivery, delivery area, terms of delivery, quality of service, place of consignment pick-up, etc.).

In accordance with the Public Procurement Act, subject of the tender has to be clearly described, and comparability of tenders in terms of the conditions and requirements of the contracting body has to be set and ensured. Furthermore, when describing subject of procurement, all the features relevant to the execution of the contract, such as a place of execution, implementation deadlines or special requirements regarding the manner of execution of procurement, etc., have to be stated. The same applies to special aggravating or mitigating circumstances.

#### 3. Most economically advantageous tender

The goal of the application of most economically advantageous tender criterion is to select a tender which gives the best value for money. From the viewpoint of the contracting authority, the application of the most economically advantageous tender criterion is more complex because it requires more preparation and analysis. However, the main benefit of applying the MEAT criterion is the fact that contacting authority may take into account the qualitative aspects, and innovation or innovative solutions. This is especially important for small and medium enterprises, which are a source of innovation and important research and development activities. The contracting authority may also consider the life cycle costs and not just the direct costs of the acquisition (or initial purchase price) in accordance with the set specifications and conditions.

#### 3.1. Application of Saaty scale for most economically advantageous tender comparison

Based on defined criteria and sub-criteria presented in Table 1, by applying the Saaty scale [1] a survey was conducted among competent experts in the public procurement sector

that included 22 respondents. The problems decision-maker are facing when choosing the most economically advantageous tender arise from the fact that the criteria are expressed in different units (for example: price and insurance in monetary units, delivery time in hours, accessibility in the number of offices, while servicing, Track&Trace and reporting are expressed in weather they are or not offered). In addition, not all criteria are equal. Some of them are cost type ("less is more", for example price), some are utility type ("bigger is better", for example warranty period).

The analysis of the survey results determines importance of selected criteria and subcriteria in relation to the decision making objective of the choice of postal service providers [2].

Criteria	Description
Service price (CJE)	Total cost of postal services defined by cost estimation.
Service quality (KVA)	The quality of services represents delivery of the consignments, which can be the next business day $(D + 1)$ , 2 working days $(D + 2)$ , 3 working days $(D + 3)$ , 4 working days $(D + 4)$ . Delivery deadline significantly affects the cost of the service.
Service accessibility (DOS)	Number of access points (branches) where users can pick their shipments.
Additional services (DOP)	Additional services are services that are related to the basic postal services. Most important are: Service (SER) - delivery and collection of consignments at the premises of the user at the agreed time. Track and Trace (T&T) - Electronic ability to track the status of shipments. Insurance (OSI) - represents a range of insurance of shipments (3000 – 10000 HRK). Reporting (IZV) - involves submission of information on a weekly basis on the services (quantity of delivered shipments, the amount of shipments that are in the post office for delivery, etc.).

Table 1. Defined criteria and sub-criteria in public procurement of postal services

Analysis of survey results showed that the highest priority is given to the service quality criterion (38.44%), followed by the service price criterion (29.07%), service accessibility criterion (22.81%) and additional services that are included in the basic service price (9.68%), as shown in table 2.

For additional services criterion, four sub-criteria were defined (servicing, Track&Trace, insurance and reporting). By analysing the survey results, it was found that the highest priority has servicing sub-criterion (3.86%), followed by insurance sub-criterion (3.46%), Track&Trace (1.56%) and reporting (0.80%), as shown in Table 3.

Criteria	CJE	KVA	DOS	DOP	Average value
CJE	0,3000	0,3751	0,1875	0,3000	0,2907
KVA	0,3000	0,3751	0,5625	0,3000	0,3844
DOS	0,3000	0,1249	0,1875	0,3000	0,2281
DOP	0,0999	0,1249	0,0624	0,1000	0,0968

Table 2. Overall criteria priorities

Criteria	SER	Т&Т	OSI	IZV	Average value
SER	0,3948	0,4091	0,3751	0,4167	0,3989
Т&Т	0,1315	0,1364	0,1249	0,2500	0,1607
OSI	0,3948	0,4091	0,3751	0,2500	0,3572
IZV	0,0790	0,0454	0,1249	0,0833	0,0832

Table 3. Overall sub – criteria priorities of additional services criterion

The overall priorities of the criteria and sub-criteria are applied to normalized data on tenders of various service providers, as shown in Table 4. Derived priorities of providers are presented in table 5.

DOP CJE KVA DOS SER Т&Т OSI IZV Туре min min max max max max max Millions Unit hours number yes/no yes/no kuna yes/no of kuna Provider1 2,70 48 400 + 10.000 --Provider2 2,50 48 250 + +5.000 + Provider3 2,10 72 300 3.000 --\_ 2.90 24 500 ++5.000 Provider4 +

Table 4. Values of postal service providers tenders

Table 5. Derived priorities of providers by applying Saaty scale

	CJE	KVA	DOS	DOP				Tender
	COL	1	005	SER	Т&Т	OSI	IZV	value
Provider1	0,19	0,25	0,60	1,00	0,00	1,00	0,00	0,36
Provider2	0,42	0,25	0,00	1,00	1,00	0,29	1,00	0,29
Provider3	1,00	0,00	0,20	0,00	0,00	0,00	0,00	0,34
Provider4	0,00	1,00	1,00	1,00	1,00	0,29	1,00	0,68

For application of the relative model in tenderers evaluation in public procurement procedure, it is necessary to determine percentage of relevant criteria. The price is often pointed out as the most important criterion with the highest importance. Speaking of public procurement of postal services, as the most important criterion is quality of service, which is in present environment very important as it affects customer's service experience.

# **3.2.** AHP method for selection of most economically advantageous tender of service provider

AHP represents a process which allows the decision makers to set the priorities and facilitates decision-making in the case when quantitative and qualitative

characteristics need to be taken into consideration. The process allows facilitation of decision-making procedure into a number of individual comparisons between the set goals and criteria. The modelling process is consisted of four basic steps: hierarchical model is developed, comparison of elements of the structure through Saaty scale of relative importance is conducted, the assessment of the relative importance of elements is used to calculate the local priorities, sensitivity analysis is determined at the end.

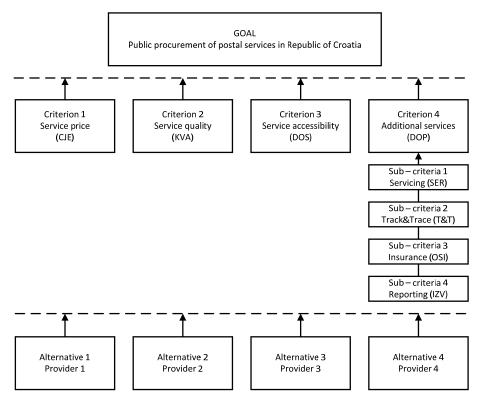


Figure 1: AHP model of public procurement of postal services

In order to facilitate decision-making related to postal service providers, by applying AHP method it is necessary to determine the value of preference for selected alternatives with respect to defined criteria and sub-criteria. Subjectivity of decision maker affects decision making process. Table 6 shows an example of comparison of service providers considering the price criterion.

СЈЕ	Provider 1	Provider 2	Provider 3	Provider 4
Provider 1	1	1/3	1/7	3
Provider 2	3	1	5	5
Provider 3	7	1/5	1	9
Provider 4	1/3	1/5	1/9	1

Table 6. Pairwise comparison matrix for the alternatives with respect to price

In case of applying overall priorities of criteria and sub-criteria, final results for provider ranking are obtained: Provider 1 (0.20), Provider 2 (0.177), Provider 3 (0.253) and Provider 4 (0.37). By applying AHP method, the same result is obtained for the selection of the service provider as in the case of tender evaluation, shown in Table 5.

## 4. Conclusion

While performing evaluation in the public procurement process, contracting body could apply one of the two criteria for the selection of tenders, i.e. lowest price (as the sole criterion) or the most economically advantageous tender. By selecting the most economically advantageous tender, analysis of more relevant criteria and their impact in the evaluation process has to be determined. Application of Saaty scale ensures tool for qualitative mutual comparison of criteria used in the procedure of postal service provider selection. It can be concluded that the quality of service is the most important criterion in public procurement of postal services. It indicates that users are willing to pay more for postal services, if those services guarantee shorter delivery times. By applying AHP method, it has been shown that although subjectivity in the evaluation is present, it generates the same result of service provider selection as it is in relative model of public procurement procedure.

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**Sažetak:** Liberalizacija tržišta poštanskih usluga za obveznike primjene Direktiva o javnoj nabavi obuhvaća i obvezu provođenja postupka javne nabave poštanskih usluga koji omogućuje odgovarajuće tržišno natjecanje. U okviru istraživanja problema, zbog međusobno neusporedivih čimbenika koji utječu na realizaciju usluge, prikazana je analiza primjene višekriterijske analize kao alata i AHP metode u postupcima javne nabave kod odabira ekonomski najpovoljnije ponude. Osnovni problem koji se pritom pojavljuje je izbor relevantnih kriterija i pripadajućih podkriterija, koji imaju veći ili manji utjecaj na izbor davatelja usluge.

Ključne riječi: poštanske usluge, javna nabava, AHP metoda, ekonomski najpovoljnija ponuda

JAVNA NABAVA POŠTANSKIH USLUGA U UVJETIMA LIBERALIZACIJE TRŽIŠTA Darko Josipović, Estera Rakić, Katarina Mostarac, Zvonko Kavran