# UNIVERSAL POSTAL SERVICE MARKET IN BULGARIA: STATE AND CHALLENGES Anna Otsetova, Lian Nedelchev

**Abstract**: The Bulgarian postal market has undergone significant changes in the past several years. Global trends such as the higher popularity of e-commerce, development of small and medium enterprises, higher activity of exporters, increasing competition and higher demands of clients have caused a major structural shift in the postal industry – a decline in the demand for traditional postal services and an increase in the volume of parcel delivery services. The impact of information and communication technologies (ICT), competition, liberalization and the users demand for better and more reliable postal services have a major impact on the postal sector and particularly on the segment of Universal Postal Service (UPS). The present paper discusses the process of liberalization of the Bulgarian UPS market, the scope of the UPS obligations and the level of competition and concentration. The results show that despite of increased competition in Bulgarian UPS market the state of competition in this market segment is still relatively low and the market is highly concentrated.

Keywords: Universal Postal Service, Postal Services Market, Liberalization, Competition and Concentration.

#### Introduction

Postal services are services of General Economic Interest and have a central role in an effective and dynamic single European market. Recent advances in ICT have been the engines of huge transformations in the postal sector. The postal sector is a key contributor to the European economy. Nowadays postal industry in Europe employs more than 2 million people and connects more than 800 million people daily. Postal sector generates turnover of more than 150 billion euros and about 1% of the European Union Gross Domestic Product [EU Commission, 2018].

Global trends such as the higher popularity of e-commerce, development of small and medium enterprises, higher activity of exporters, increasing competition and higher user demands have caused a major structural shift in the postal industry – a decline in the demand for traditional postal services and an increase in the volume of parcel delivery services.

Since the beginning of the 1980s, a key driver of change in the postal sector has been the introduction of new means of communication, which have entered into direct competition with the traditional postal services. The advanced ICT challenged the postal sector in two directions: the speed of communication transmition and the costs. At the same time, the ICT offered important opportunities for the postal sector. It became possible to organize the collection and distribution of postal items more effectively and to offer new innovative postal services. The impact of ICT, competition, liberalization and the users demand for better and more reliable postal services have a major impact on the postal sector and particularly on the segment of UPS.

The objective of this paper is to examine the current conditions in the Bulgarian UPS market and to emphasize its most characteristic aspects that can attribute to a stable and profitable postal market. The paper discusses the process of liberalization, the scope of the UPS and the level of competition and concentration.

## **Liberalization of the Bulgarian Postal Market**

Universal postal service is defined as a set of postal services provided in a country, within the prescribed quality, at affordable prices and under equal conditions for all users.

On the international level, UPS is regulated by the Universal Postal Union Acts and European Postal Directives. The main objectives of the Postal Directives are: to protect and promote an affordable, reliable and efficient UPS and to promote a fully operational internal market in postal services [Pilinkienė et al., 2017].

The process of liberalization of the European Postal Market started with Green Paper in 1992. The Green Paper presented the need of creation of an overall political and regulatory framework in the field of postal services, emphasizing the need for the provision of UPS at the national level, at affordable prices.

The launched process of transformation resulted in the adoption of so called Postal Directives (Postal Directives 1997/67/EC, 2002/39/EC and 2008/6/EC). The aim of the First Postal Directive was the creation of a common regulatory framework for better postal services provision and of postal market development in the European Union (EU). The Directive defines: the minimum UPS scope; which postal services can be reserved for the universal service provider(s); accessibility, frequency of collection and delivery, quality and price of UPS.

The Second Postal Directive (2002/39/EC) was a step ahead in the process of liberalization. It is amending Directive 97/67/EC with regard to the further opening to competition of postal market. According to the Directive, the Member States may continue to reserve services to universal service provider(s), but they have to reduce the price and weight limits for the reservable area. The aim of the

Second Postal Directive was the reduction of the monopoly of national postal operators (incumbent operators).

The reservable area is defined in the Postal Directives as "the clearing, sorting, transport and delivery of items of domestic and cross-border correspondence, the price of which is less than 5 times the public tariff for an item of correspondence in the first weight step of the fastest standard category where such category exists, provided that they weigh less than 350 gr (1997), 100 gr (2003), 50 gr (2006)". This area can be reserved by Member States for the universal service provider(s) [Directive 97/67/EC].

In February 2008 the Third Postal Services Directive (2008/6/EC) was adopted. The Directive introduced the legal basis for the accomplishment of the internal market for postal services by providing the last legislative step in the process of gradual market opening. It sets a deadline for full market opening of 31 December 2010 for 16 Member States (Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Slovenia, Spain, Sweden, UK) and 31 December 2012 for the remaining 11 Member States (Cyprus, Czech Republic, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Romania and Slovakia) [Directive 2008/6/EC].

Universal service obligations (USO) refer to the criteria according to which a baseline level of postal service is uniformly provided in a country. The provision of USO has been subject to major discussions in recent years. Now postal markets are opened to competition. At the same time declining letter mail volumes and increasing competition have already placed extreme financial pressures on universal service providers [Khazabi, 2016].

Bulgarian Postal Market was fully opened in 2011. As a state-owned enterprise structured as a corporate entity, Bulgarian Posts is responsible for the provision of UPS in Bulgaria, in fully liberalized postal market. The company provides UPS on the territory of the whole country, including in rural areas, with a certain quality level and at affordable prices. Universal service is partially funded by the Bulgarian government when the USO results in net costs and represents an unfair financial burden for it. Bulgarian Posts operates a postal network of 2981 offices and a workforce of 10508 employees 72,3% of which are full-time (31.12.2016) [Bulgarian Posts, 2016].

The main transformation in the UPS market in Bulgaria is summarized in Table 1.

In connection with the joining of Bulgaria to the European Union on 01.01.2007, amendments of the Postal Service Act have been adopted in the beginning of 2006, aimed at completing the transposition of the Second Postal Directive. On January 1, 2006, the reserved sector has been reduced (from 350 gr to 150 gr) which opened 12% extra letter-post to competition. After this date in the segment for universal service, competitors of Bulgarian Posts have entered the market. The licensing of new operators for the entire universal service is an important step towards full liberalization of the postal market. Providing services in the frame of the universal service outside of the reserved sector by alternative operators is permitted under individual license. At this time, the new entrants were still in the business development phase with regard to the provision of services and the development of a nationwide postal infrastructure. The new postal operators cooperated in certain areas with Bulgarian Posts and each other, especially in reaching the rural areas of the country.

Table 1. Liberalization of the Bulgarian UPS Market

Year	Reserved sector/ Provider	Market conditions	Competitors
1997	up to 350 gr / Bulgarian Posts	State monopoly	
2006	01.01.2006 – weight limit up to 150 gr / Bulgarian Posts – till 31.12.2008.	The company performs around 96% of the services from the scope of UPS.	Tip Top Courier, Econt Express
2007	01.01.2007 – weight limit up to 50 gr / Bulgarian Posts – till 31.12.2008.	The company performs around 96% of the services from the scope of UPS.	Tip Top Courier, Econt Express
2008		The company performs around 96% of the services from the scope of UPS.	Tip Top Courier, Econt Express, M§BM Express
2010		Bulgarian Posts performs around 96% of the services from the scope of UPS.	Tip Top Courier, Econt Express, M§BM Express, Star Post, Terra Post Services
2011		Fully liberalized market.	Tip Top Courier, Econt Express, M§BM Express, Star Post, Terra Post Services
2014		Fully liberalized market.	Tip Top Courier, Econt Express, M§BM Express, Star Post, Terra Post Services, Speedy

Since January 1, 2007, with the adopted amendments of the Postal Services Act, the limits for weight for the services in the reserved sector are reduced to 50 gr.

The reserved sector was removed from the beginning of 2011. The last remaining barriers to competition in Bulgaria were eliminated. Full liberalization is the last step in a more than decade long process in which postal market in Bulgaria has gradually been opened to competition (Figure. 1).

The postal service market in Bulgaria has evolved rapidly in the past decades, mainly due to the changing market conditions and the development of consumer needs, which in turn results in a change in demand for postal services. The main characteristics of the Bulgarian postal market development are: continued redistribution of the market shares and development of competition.

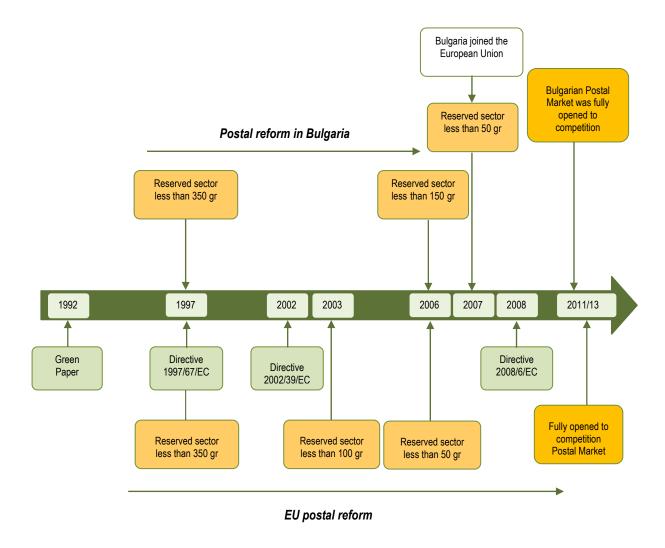


Figure 1. EU postal reform and postal reform in Bulgaria (prepared by the authors)

### Competition in the UPS Market in Bulgaria

Nowadays, in all Europe UPS operators are facing major challenges: declining letter volumes due to the electronic substitution and increasing competition from private postal operators due to the full liberalization of the Postal Market. The experience from other EU countries that have previously liberalized postal market showed that the competition in the UPS market is developing slowly [Kyriaki, 2015].

Below we consider in detail the dynamics of the market shares of the operators in the UPS segment in Bulgaria.

From the beginning of 2011 the competition in services within the scope of UPS has been gradually growing. After the reserved sector advantage was removed, the market share of Bulgarian Posts continues to decline (Figure 2). The main reasons for the reduction of the market share of the incumbent operator are the reduced volume from the UPS market segment and the significant growth of the non-UPS generated by the competitive operators.

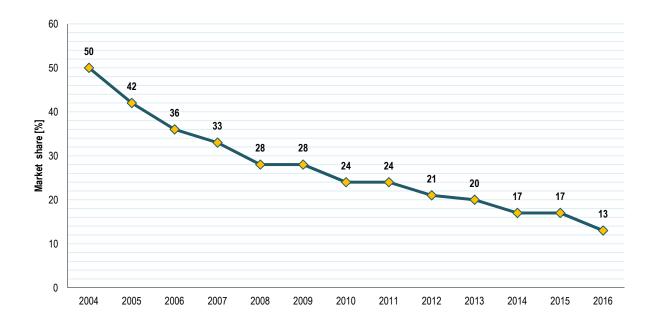


Figure 2. Market share of Bulgarian Posts, 2004 – 2016

2011 was the first year of UPS market liberalization. The active work of UPS operators was visibly noted in 2012 (Figure 3). Bulgarian Posts retained its leading position, but it lost a significant share – about 7%.

During 2013, as a result of the removal of reserved sector in UPS market and competition development, the market share of Bulgarian Posts decreased by 16% while the leading competitor Econt Express gained a market share of 19%.

In 2014 Bulgarian Posts continued to lose its market position and its share decreased by 7% compared to 2013. For a second year, the next largest player in UPS segment was Econt Express. With a growth of 11%, the postal operator gained a market share of 30%.

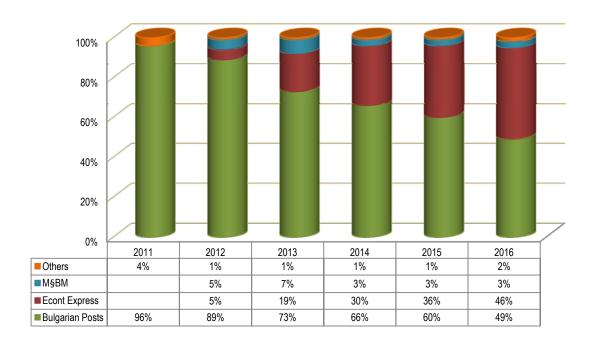


Figure 3. Market shares of UPS postal operators

In 2015 the new entrant Speedy reported activity and revenue from services provided within the scope of UPS, but together with Star Post and Tip-Top Courier they constitute a market share of 1 %.

In 2016 Bulgarian Posts lost another 11%. The market share of Econt Express has increased by 10%. The so called "Others" operators gained market share of 2%.

In the context of increasing competition in the UPS market in Bulgaria, one of the important issues is a question of market power and market concentration as a specific indicator of market power.

According to the principle of Competition Law, the Herfindahl-Hirschman Index (HHI) and the Concentration Ratio (CR) assess the degree of concentration. The HHI is a parameter indicating the competition between the firms operating in the same market as it provides a means of using the relationship between the number of firms and their respective market share to define the level of the concentration (implying competition) [Diallo, Tomek, 2015].

The HHI is calculated by squaring the market shares in percent of all operators in a market, and then summing the squares, as follows:

$$HHI = \sum_{j=1}^{n} MSi \tag{1}$$

where  $MS_i$  represents the market share of operator j and there are n operators in the market.

Based on the HHI value, the market is determined as: competitive market with low level of concentration, relatively competitive market with average level of concentration and less competitive market with high level of concentration (Table 2).

The CR is the ratio of the combined market shares of a given number of operators to the whole market size. It is most common to consider the 3-operator, 4-operator or 5-operator concentration ratio (CR3, CR4, CR5). Concentration ratio is usually used to show the extent of market control of the largest postal operators in the sector (Table 2) [Pilinkienė et al., 2017].

Table 2. Interpretation of HHI and CR Index

Market definition according to HHI and CR value	HHI general Interpretation	CR general Interpretation
Highly competitive market / Low concentration	HHI<100	CR3=0
Effective competition / Low concentration	100 <hhi<1000< td=""><td>CR3&lt;40; CR4&lt;50</td></hhi<1000<>	CR3<40; CR4<50
Effective competition / Moderately concentrated market	1000 <hhi<2000< td=""><td>40<cr3<70; 50<cr4<85< td=""></cr4<85<></cr3<70; </td></hhi<2000<>	40 <cr3<70; 50<cr4<85< td=""></cr4<85<></cr3<70; 
Low competition / Highly concentrated market	HHI>2000	CR3>70; CR4>85

By implementing the Third Postal Directive in Bulgaria, which came in force on January 1, 2011, the UPS market has been opened to competition, ensuring equal opportunity for private business entities to operate in the market.

The dynamics of market conditions in the Bulgarian UPS market is summarized in Table 3.

Table 3. Competition and concentration on the Bulgarian UPS market (calculated by authors on the basis of Annual reports of the Communications Regulation Commission, 2009-2016)

Year	ННІ	CR4
2009	9093	99,99
2010	9060	99,86
2011	9232	99,66
2012	7972	99,65
2013	5740	99,62
2014	5266	99,12
2015	4906	99,00
2016	4532	98,00

The HHI shows that for the period 2009-2014 the market is highly concentrated (HHI>5000). This means that the level of competition is low. The HHI was constantly decreasing from 2011, showing an increase in the market competition. Despite of increased competition in Bulgarian UPS market, the state of competition in this market segment is still relatively low and market is highly concentrated.

# The Scope of UPS in Bulgaria

The UPS is a service, which is provided constantly within certain working time with quality complying with the norms, at affordable prices and possibility for its use by every consumer on the territory of the country, irrespective from his/her geographic location. The incumbent operator is obliged to provide it on all working days, at least 5 days a week with the exception of the remote areas.

The First Postal Directive set a minimum UPS scope, guaranteed by Member States, at the same time it determined which postal services can be reserved for the universal service provider, in order to maintain the sustainability of UPS. This Directive also defines minimum requirements regarding the UPS scope, accessibility, frequency of collection and delivery, quality and price, as shown in Table 4.

Table 4. Universal Postal Service base on Directive 97/67/EC [Directive 97/67/EC]

Scope of UPS	<ul> <li>Letter items up to 2 kg;</li> <li>Parcels up to 10 kg, (can be set up to 20 kg by Member State);</li> <li>Delivery of international inbound parcels up to 20 kg;</li> <li>Supplementary services "registered items "and "declared value".</li> </ul>	
Accessibility	Density of the access points in accordance with the users' needs.	
Frequency	One collection and one delivery every working day, not less than 5 times a week.	
Quality	End-to-end Transit Time: D+3 – Service Quality Target: not less than 85% of the postal items;  End-to-end Transit Time: D+5 – Service Quality Target: not less than 97% of the postal items.	
Price	Accessible, cost-oriented, affordable for all users.	

Based on the prescribed minimum requirements, Member States are allowed to adapt UPS in accordance with their national specifics.

The changes in scope of the UPS in Bulgaria are summarized in Table 5.

Table 5. Scope of UPS in Bulgaria

Year	Scope of UPS
	1. Acceptance, transport and delivery of domestic and international postal items as follows: letter items up to 2 kg; small packets up to 2 kg; direct mail up to 2 kg; books, newspapers and periodicals up to 5 kg; secogrammes (postal service for blind and partially sighted people) up to 7 kg;
2006, 2007, 2008	2. Acceptance, transport and delivery of domestic and international parcels up to 20 kg;
	3. Postal money orders;
	4. Supplementary services (registered, insured).
2009	1. Acceptance, transport and delivery of domestic and international postal items as follows: letter items up to 2 kg; small packets up to 2 kg; direct mail up to 2 kg; books, newspapers and periodicals up to 5 kg; secogrammes (postal service for blind and partially sighted people) up to 7 kg;
	2. Acceptance, transport and delivery of domestic and international parcels up to 20 kg;
	3. Supplementary services (registered, insured).
2010, 2011, 2012, 2013, 2014, 2015,	1. Acceptance, transport and delivery of domestic and international postal items as follows: letter items up to 2 kg; small packets up to 2 kg; books, newspapers and periodicals up to 5 kg; secogrammes (postal service for blind and partially sighted people) up to 7 kg;
2016	2. Acceptance, transport and delivery of domestic and international parcels up to 20 kg;
	3. Supplementary services (registered, insured).

The main changes in the scope of UPS in Bulgaria are as follow:

- In 2009 the "postal money order" services have been taken out of the scope of UPS.
- In 2010 the "direct mail" services have been removed from the scope of UPS.
- In 2011 the postal market in Bulgaria was fully opened for competition, by removing the reserved sector.

Based on a study of postal legislation in all EU Member States it was found that the scope of UPS in Bulgaria and Ireland is the widest (Figure 4).

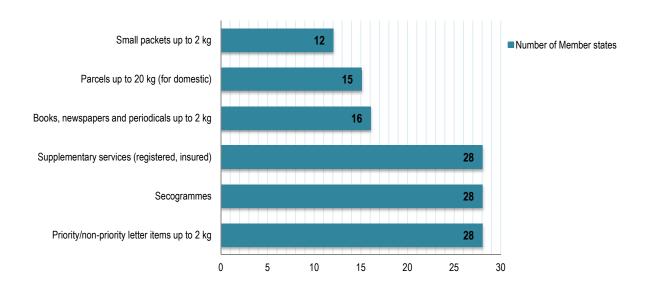


Figure 4. Scope of UPS in EU Member states

Bulgaria is the only country where the scope of UPS includes delivery of books, newspapers and periodicals up to 5 kg. Most of the countries proposed delivery of books, newspapers and periodicals up to 2 kg (15 countries). In the rest of the EU member states the delivery of books, newspapers and periodicals is out of the scope of UPS.

54% of the countries include the acceptance, transport and delivery of domestic and international parcels up to 20 kg in the scope of UPS (including Bulgaria), the rest 46% have limited the acceptance, transport and delivery of domestic parcels up to 10 kg.

From all 28 Member states 12 include in the scope of UPS the service "small packets" up to 2 kg (including Bulgaria).

The main trend in Bulgarian UPS market in past 10 years is the increase in the volume of domestic and international parcel delivery services (Figure 5).

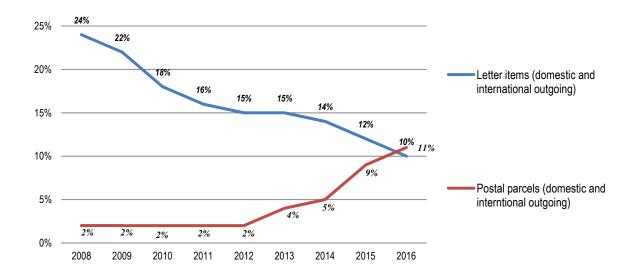


Figure 5. Revenue from letter items and parcels (% in total revenue from all postal services)

In 2016 the parcel delivery services form 11% in the total revenues from all postal services. The downward trend in the letter items market is due to a substitution of traditional postal services with electronic ones. Contrary to the letter items market, the parcels market is not adversely affected by the development of electronic communications. Instead, the significant rise of e-commerce has a positive impact on the volume of parcels market.

New reality in the sector is a challenge for the Bulgarian incumbent operator. In order to limit the shrinkage of its business, Bulgarian Posts has to develop areas of activity in the digital space.

Structural decline in letter volumes is not just a feature of the Bulgarian Postal Markets; but is also apparent in all EU Member States. In many EU countries, regulators, governments and UPS providers have taken steps to reform universal postal obligations to respond to volume decline by changing the scope of the universal service. With respect to the changes of the Bulgarian Postal Market being in progress, it should be evaluated in depth whether all services within the scope of UPS are still relevant.

#### Conclusions

Based on this study following conclusions can be formulated:

- (1) UPS market in Bulgaria is characterized as a low competitive and highly concentrated.
- (2) Bulgarian Posts retained its leading position in the UPS market, but it lost a serious share about 47% from 2011.
- (3) From the beginning of 2011 the competition in services within the scope of UPS has been gradually growing but it's still not sufficiently effective.
- (4) UPS obligations have heavy impact on the market. It seems reasonable to analyze the scope of UPS by the national policy makers.
- (5) Bulgarian Posts strategy needs to be adapted to new digital needs. In the frame of this continuously changing international environment along with the liberalization of the Bulgarian Postal Market, Bulgarian Posts has to be converted in a modern company providing postal and electronic services aiming at customer new "digital" needs.

## **Bibliography**

- [Diallo, Tomek, 2015] Diallo, A., Tomek, G., The Interpretation of HH-Index Output Value When Used As Mobile Market Competitiveness Indicator, International Journal of Business and Management; Vol. 10, No. 12, 2015, pp. 48-53.
- [Khazabi, 2016] Massoud Khazabi, Postal service markets: an international comparison analysis, Journal of Public Affairs, DOI: 10.1002/pa.1599.
- [Kyriaki, 2015] Kyriaki, K., Strategic Analysis of the Greek Postal Market: a case study for Hellenic Post, Procedia Social and Behavioral Sciences 175, 2015, pp 464 472.
- [Pilinkienė et al., 2017] Pilinkienė, V., Deltuvaitė, V., Daunorienė, A., Gaidelys, V., Competitiveness Creation and Maintenance in the Postal Services Industry (A Lithuanian Case Study), Springer International Publishing Switzerland, 2017, ISBN 978-3-319-31906-3.
- [Bulgarian Posts, 2016] Annual Report of Bulgarian Posts, 2016, http://www.bgpost.bg/bg/191
- [Communication Regulation Commission, 2016] Annual Reports of Communication Regulation Commission, 2004-2016, <a href="http://www.crc.bg/">http://www.crc.bg/</a>

[Directive 97/67/EC] Directive 97/67/EC of the European Parliament and of the Council of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of service, OJ L 015 of 21 January 1998.

[Directive 2002/39/EC] Directive 2002/39/EC of the European Parliament and of the Council of 10 June 2002 amending Directive 97/67/EC with regard to the further opening to competition of Community postal services, OJ L 15 of 7 May 2002.

[Directive 2008/6/EC] Directive 2008/6/EC of the European Parliament and of the Council of 20 February 2008 amending Directive 97/67/EC with regard to the full accomplishment of the internal market of Community postal services.

[EU Commission, 2018] Postal services, https://ec.europa.eu/growth/sectors/postal-services\_en.

[Postal Services Act, 2017] Postal Services Act, rom. SG. 64/4 Aug 2000, amend. SG. 112/29 Dec 2001, amend. SG. 45/30 Apr 2002, amend. SG. 76/6 Aug 2002, amend. SG. 26/21 Mar 2003, amend. SG. 19/1 Mar 2005, amend. SG. No.38 of May 18, 2012, amend. SG. No.61 of Jul 18, 2014, amend. SG. No.81 of Oct 14, 2016, amend. SG. No.95 of Nov 29, 2016, amend. SG. No.97 of Dec 5, 2017.

#### **Authors' Information**



Anna Otsetova – University of Telecommunications and Post, Sofia, 1 Acad. St. Mladenov Str. Sofia 1700. Bulgaria, E-mail: aotsetova@abv.bg

Major Fields of Scientific Research: Postal services, Quality of services, Operation management, Customer satisfaction, Supply Chain Management



**Lian Nedelchev** – University of Telecommunications and Post, Sofia, 1 Acad. St. Mladenov Str, Sofia 1700, Bulgaria, E-mail: lian n@yahoo.com

Major Fields of Scientific Research: Media and devices for Data storage, Data Sets Analysis, E-Learning, Physics and Electronics