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**I**



**UNIVERSITY OF KRAGUJEVAC  
FACULTY OF HOTEL MANAGEMENT  
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# ICT READINESS AS A FACTOR OF TOURISM COMPETITIVENESS

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## **Abstract**

*Information and communication technologies have changed the way of doing business in all sectors of the economy. In the field of tourism, information and communication technologies are not only a generator of change, but also one of the most important drivers of the development and achievement of a satisfactory level of competitiveness of this sector. The paper analyzes the information and communication readiness of selected countries as a factor of tourism competitiveness. The aim of the paper is to examine the relative position of the Balkan countries, including Serbia, according to indicators of the ICT readiness pillar within the Travel and Tourism Competitiveness Index of the World Economic Forum. The methods applied in the paper are correlation and benchmarking analysis. The results of research indicate the existence of positive interdependence between ICT readiness and tourism competitiveness in the Balkan countries and enable the identification of indicators in this field that require improvement in the future.*

*Key Words: information and communication technologies, tourism, competitiveness*

*JEL classification: O33, Z32*

## **Introduction**

The role of information and communication technologies (ICTs) in contemporary conditions is undeniable and invaluable. For years, it has been said that we live in the information age. The amount of information exchanged is increasing, and the ways of transferring information are

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more efficient and more sophisticated. ICTs are an integral part of life to such extent that the functioning of any segment of the society is practically inconceivable without it. The role of these technologies in removing time and space constraints is as revolutionary as it was once the role of transport technology. Information systems have played an important role in many industries, including tourism.

Tourism is an information-intensive industry, therefore, it is critical to understand changes in technologies and consumer behaviour that impact the distribution and accessibility of travel-related information (Xiang & Gretzel, 2010, p. 179). Information is a crucial factor in planning, booking and during the travel, and sometimes even after that. Because of this, tourism is one of the industries the rapid changes in ICTs have had the greatest impact on over the last twenty years (Crnojevac, 2010, p. 40). These technologies in tourism are not only important for tourists, but for the overall way of doing business in tourism and related activities. ICTs have profound implications for tourism and e-tourism reflects the digitization of all processes and value chains in the tourism, travel, hospitality and catering industries (Buhalis & O'Connor, 2005, p. 11). The fact that tourism is the primary economic activity in many countries has been adopted by all countries in the world (Stanišić & Milutinović, 2016, p. 67), with an increasingly important role in the world economy (Gnjatović & Leković, 2015, p. 48). As tourism is one of the leading industries in modern conditions (Gnjatović & Leković, 2016, p. 51), the transfer of information, as well as the tools and mechanisms for its management, must be of high standard and quality. Among other things, tourism as an international industry with significant economic effects (Ristić et al., 2016, p. 666) and as the biggest provider of jobs on the planet boasts a greater array of heterogeneous stakeholders than many other industries. The accelerating and synergistic interaction between technology and tourism in recent times has brought fundamental changes in the industry (Buhalis & Low, 2008). The energetic growth and development of the tourism industry is perhaps only mirrored by the growth of ICTs.

The paper examines the role and importance of ICTs and ICT readiness for the achieved level of tourism competitiveness in selected countries. Two groups of countries are analysed. Firstly, indicators that represent ICT readiness of the ten leading European countries in this field are considered. Then, the ICT readiness of the Balkan countries is analysed. The importance of ICT readiness for the tourism competitiveness in the

Balkan countries is examined by the correlation analysis. Benchmarking analysis, with the achieved results by the leading European countries as benchmark, has highlighted critical ICT readiness factors in the Balkan countries that require improvement in order to increase the level of tourism competitiveness of these countries.

### **Literature review**

Modern information technologies are changing our entire society, and also the tourism sector. Information technologies, Internet and social networks change tourism activity daily. Technology has become a propulsive development factor with great influence on all of the elements and factors of business processes, sectors and the economy as a whole (Krstić & Stanišić, 2014). Technology becomes a main source of sustainable competitive advantage and a strategic weapon, especially in the tourism and hospitality industries (Buhals & Main, 1998, p. 198). Since the value chain in tourism is made up of a large number of stakeholders, starting with the promoters of the tourist offer, through competition to the final consumers of tourist services, information systems play a key role in the exchange of information, knowledge, products and services (Milićević et al., 2013). The truth is that tourism may not follow these processes consistently, but it is more complicated. This complexity arises from the complexity of the tourist market, tourist product and all tourism manifestations. It also comes from the need to coordinate a number of participants in creating and delivering a tourist product (Rađenović & Kozić, 2014, p. 726).

Thanks to new technologies, tourism has recorded incredible growth nowadays, and this area of tourism has a need for professional staff. The ability of the ICT industry to respond to the high demands of users who want more bandwidth and availability of different services with an appropriate level of quality depends on the ability of the personnel (Krstić et al., 2015, p. 748). The ICT industry has changed everything in tourism and has brought completely new occupations and new business models. It is advantageous for tourism and hospitality managers in general and marketing managers in particular to be aware of the recent changes in ICTs and their relationship with customer service. As ICT development becomes more sophisticated, industrial practitioners, educators, and policy makers may find the selection, analysis, implementation and operating new ICT systems increasingly difficult (Law et al., 2009, p. 600). Successful and accomplished practitioners will demonstrate how

new technologies can be used in the promotion and sale of tourism products and services.

The most important forms of ICTs in tourism are reflected in the use of: reservation systems, global distribution software applications in catering, destination support and management systems, electronic intermediation in the organization of travel via the Internet, geographic information systems, mobile platforms, etc. The first major impact of ICTs in the tourism sector was the introduction of the Computerized Reservation System (CRS) in the 1970s. In the 1980s, the Global Distribution System (GDS) emerged, as a logical upgrade to the reservation system, uniting a wide range of services and products and bringing global distribution information structure in the entire tourism sector (Milovanović & Gligorijević, 2017, p. 109). Nowadays, the application of ICTs in tourism is very wide and constantly finds new areas of activity. Increase in capacity, speed of information flow and internet development directly affect the increase in the number of tourists in the world who use the Internet as the primary source of information when planning a trip, but also during its realization (Mišković et al., 2015, p. 76). The use of the Internet, Global Positioning System (GPS) or mobile phones influences the creation of a positive adventure and the experience of tourists (Borisavljević, 2016, p. 278).

With the help of ICTs, many activities in tourism are performed, such as direct contact with clients and partners, booking, check-in/check-out, payment, staff management, marketing, entertainment and customer service, communication with customers and partners, market research, differentiation and personalization of products, provision of new tools for marketing and promotion of destinations. Traditional marketing communications that establish unilateral, very often inefficient communication with tourists, in the last years of the 20th century and at the beginning of the 21st century, are enriched by digital communications whose basic characteristic is fast, efficient, two-way, interactive communication (Jovanović & Jovanović-Tončev, 2015, p. 65). Therefore, the intensive use of ICTs in the tourism sector, especially with the massive expansion of the internet services, has influenced the development of a new concept of tourism business that can be called e-tourism (Milovanović & Gligorijević, 2017, p. 109). Tourists can plan their trips, develop individual packages online, or buy commercial packages from tour operators.

New digital platforms connect service providers directly with tourists. It's easier to get directly to tourists, but also tourists have more and more easily accessible information, and the ability to voice their opinions and experiences. Attitudes about the significance and role of the Internet in the hotel and tourist business indicate that it has become one of the main pillars of the global communication and information society and the most important instrument for controlling, evaluating and improving the quality of hotel and tourist services. It performs the function of supreme, supra-corporative and transnational quality control of the overall tourism industry in the world, with quality control that is performed by all interested service users (Knežević et al., 2014, p. 771). Online reviews are continuing to foster a renewed spread of word-of-mouth in the travel industry. In the travel industry, online reviews can be considered as electronic versions of traditional word-of-mouth and consist of comments published by travelers on the tourism products, services, and brands they experience. Travellers are increasingly using online reviews to inform them about accommodations and other tourism-related products (Filieri & McLeay, 2015, p. 44). Today's tourists can communicate their dissatisfaction with poor service in public, but they can also be the largest ambassadors of the most beautiful experiences.

The promotion of tourist destinations and companies can no longer be imagined without the internet and new technologies that are aimed to attract the attention of domestic and foreign guests (Petrović et al., 2017). Destinations and companies must find ways to adapt to change and provide tourists with unforgettable experiences and best service, because they will otherwise "reward" them with negative comments that will echo on the Internet. The rapid growth in the number of online users and the increasing rate of online transactions provide clear evidence of the popularity of the technology. Businesses, including customer-oriented and information-intensive tourism enterprises, are increasingly adopting e-business models to achieve their organizational goals (Law et al., 2010, p. 297). To provide information to their customers, enable e-commerce, inform and coordinate, destinations and companies use information technologies. They also use these technologies to offset marketing activities with partners, employees and consumers. Both tourism destinations and enterprises increasingly need to adopt innovative methods and to enhance their competitiveness (Buhalis, 1998). By the impact on all mentioned aspects of business activities, the efficient use of ICTs and satisfactory level of ICT readiness can be considered as an

important factor of the competitiveness of tourism enterprises, destinations and tourism at the level of the country as a whole.

### **Methodology and information base of the research**

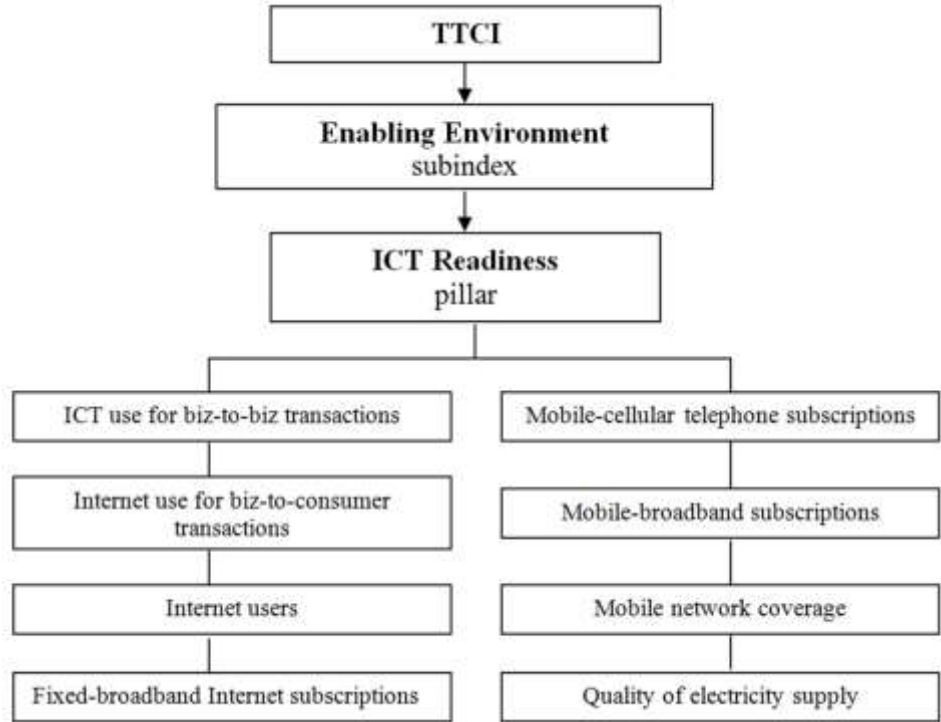
The information base of the research is data presented in The Travel & Tourism Competitiveness Report 2017 of the World Economic Forum (WEF). The Travel & Tourism Competitiveness Report 2017 contains detailed profiles for each of the 136 economies featured in the study, as well as an extensive section of data tables with global rankings covering the 90 indicators included in the Travel & Tourism Competitiveness Index-TTCI. The aim of the TTCI, which covers 136 economies this year, is to provide a comprehensive strategic tool for measuring the set of factors and policies that enable the sustainable development of the travel & tourism sector, which in turn, contributes to the development and competitiveness of a country (WEF, 2017, p. xi). Competitiveness in the tourism sector is an important factor to attract tourists and improve the environment in which tourist activity takes place. Competitiveness is one of the key issues for the tourism system and an important area for policymakers when they make tourism development strategies at the level of national economies in both, developed tourism countries, and in countries that do not have a large number of tourists (Krstić & Stanišić, 2015, p. 2).

The methodology for measuring the T&T competitiveness of the World Economic Forum systematizes the key factors into 4 subindices, i.e., into 14 pillars to quantify the level of competitiveness of each country and rankings. Each of the pillars within the TTCI subindices consists of a number of indicators (Krstić et al., 2016a, p. 13). The main focus of the research is on the ICT Readiness pillar within the Enabling Environment subindex of the TTCI. Within the ICT Readiness pillar, the eight indicators are measured (Figure 1).

Indicator *ICT use for business-to-business transactions* ( $I_1$ ) represents the answer to the question: In your country, to what extent do businesses use ICTs for transactions with other businesses? (1 = not at all, 7 = to a great extent). Indicator *Internet use for business-to-consumer transactions* ( $I_2$ ) presents answer to the question: In your country, to what extent do businesses use the internet for selling their goods and services to consumers? (1 = not at all, 7 = to a great extent). Indicator *Individuals using the internet* ( $I_3$ ) presents the percentage of individuals using the

internet. Indicator *Broadband internet subscribers* ( $I_4$ ) presents fixed broadband internet subscriptions per 100 population. Indicator *Mobile telephone subscriptions* ( $I_5$ ) means number of mobile telephone subscriptions per 100 population. Indicator *Mobile broadband subscriptions* ( $I_6$ ) means mobile broadband subscriptions per 100 population. This includes connections being used in any type of device able to access mobile broadband networks, including smartphones, USB modems, mobile hotspots and other mobile-broadband connected devices. Indicator *Mobile network coverage* ( $I_7$ ) means percentage of total population covered by a mobile network signal. Indicator *Quality of electricity supply* ( $I_8$ ) represents the answer to the question: In your country, how reliable is the electricity supply (lack of interruptions and lack of voltage fluctuations)? (1 = extremely unreliable, 7 = extremely reliable) (WEF, 2017, p. 356).

Figure 1: *Structure of the ICT Readiness pillar*



Source: WEF, 2017

In order to examine the impact of ICT readiness on the competitiveness of tourism, the values of these indicators for the top ten European countries and for the Balkan countries are analysed in the paper. The methods



applied in data processing are the method of correlation and benchmarking analysis.

## **Research results and discussion**

The results of the research are grouped into several segments:

- a) Cross-country comparison of the scores of indicators within the ICT readiness pillar;
- b) Examination of the interdependence between ICT readiness and tourism competitiveness;
- c) Systematization of critical indicators within the ICT readiness pillar in the Balkan countries.

### **a) Cross-country comparison of the scores of indicators within the ICT readiness pillar**

In order to separate countries of good practice and later benchmarking analysis, Table 1 gives an overview of the indicators within the ICT readiness pillar in the ten best ranked European countries according to the value of the ICT readiness pillar. Also, Table 1 also provides an overview of the TTCI scores for selected countries.

When the achievements of the leading European countries in the field of ICT readiness are observed, the results are fairly uniform and almost every country is a leader in at least one of the selected indicators. Norway is the best ranked according to the ICT use for business-to-business transaction indicator. United Kingdom records the best value of the Internet use for business-to-consumer transactions indicators. Iceland is the leader by the percentage of Individuals using Internet. Switzerland records the highest value when it comes to Fixed broadband Internet subscriptions and Quality of electricity supply. Estonia is best ranked according to the Mobile phone subscriptions/100 population. Finland is the leader according to the Active mobile broadband Internet subscriptions/100 population. Finally, Mobile network coverage rate of 100% is recorded in seven out of ten observed countries.

Table 1: *Scores of the indicators within the ICT readiness pillar in the top ten European countries*


Series	ICT use for business-to-business transactions, 1-7	Internet use for business-to-consumer transactions, 1-7	Individuals using Internet, %	Fixed broadband Internet subscriptions/100 pop.	Mobile phone subscriptions/100 pop.	Active mobile broadband Internet subscriptions/100 population	Mobile network coverage rate, % of pop.	Quality of electricity supply, 1-7	TTCI Travel & Tourism Competitiveness Index, 1-7
Denmark	5.84	5.70	96.3	42.5	128.3	116.8	100.0	6.75	4.43
Estonia	5.83	5.90	88.4	30.0	148.7	112.9	100.0	5.74	4.23
Finland	5.87	5.30	92.7	31.7	135.4	144.0	100.0	6.61	4.40
Iceland	5.83	5.60	98.2	37.0	114.0	93.4	99.0	6.72	4.50
Luxembourg	5.86	5.63	97.3	35.9	148.5	80.9	99.0	6.60	4.49
Norway	6.11	5.87	96.8	39.7	111.1	100.2	100.0	6.72	4.64
Sweden	6.03	6.17	90.6	36.1	130.4	122.1	100.0	6.78	4.55
Switzerland	6.09	5.76	87.5	45.1	136.5	102.0	100.0	6.89	4.94
United Kingdom	6.04	6.40	92.0	38.6	124.1	87.5	99.6	6.67	5.20
Netherlands	6.01	6.10	93.1	41.7	123.5	70.5	100.0	6.75	4.64
Average value – top 10 European countries	5.95	5.84	93.2	37.8	130.0	103.0	99.7	6.62	4.60

Source: WEF, 2017

In order to evaluate the relative positions of the Balkan countries, including Serbia, when it comes to the ICT readiness as a factor of the tourism competitiveness, Table 2 provides an overview of the scores of indicators within the ICT readiness pillar for this group of countries.

Table 2: *Scores of the indicators within the ICT readiness pillar in the Balkan countries*

Series	ICT use for business-to-business transactions, 1-7	Internet use for business-to-consumer transactions, 1-7	Individuals using Internet, %	Fixed broadband Internet subscriptions/100 pop.	Mobile phone subscriptions/100 pop.	Active mobile broadband Internet subscriptions/100 population	Mobile network coverage rate, % of pop.	Quality of electricity supply, 1-7	TTCI Travel & Tourism Competitiveness Index, 1-7
Albania	4.01	3.61	63.3	7.6	106.4	40.6	99.8	4.45	3.35
Bosnia and Herzegovina	4.12	4.28	65.1	16.6	90.2	33.5	100.0	4.59	3.12
Bulgaria	4.91	5.02	56.7	22.7	129.3	81.3	100.0	4.62	4.14
Croatia	4.51	4.22	69.8	23.2	103.8	73.1	100.0	5.77	4.42
Greece	4.34	4.23	66.8	30.9	113.0	44.0	99.9	5.26	4.51
Macedonia, FYR	4.52	4.38	70.4	17.2	98.8	53.5	99.7	4.91	3.49
Montenegro	4.38	4.11	68.1	18.1	162.2	58.2	99.5	4.01	3.68
Romania	4.62	4.97	55.8	19.8	107.1	63.7	99.9	4.73	3.78
Serbia	4.35	4.09	65.3	17.4	120.5	71.8	99.8	4.81	3.38
Slovenia	5.12	4.86	73.1	27.6	113.2	52.0	99.7	6.33	4.18
<i>The best result of selected countries</i>	5.12	5.02	73.1	30.9	162.2	81.3	100.0	6.33	4.51
<i>Average result of selected countries</i>	4.55	4.44	66.1	21.1	118.8	59.4	99.8	5.07	3.87
<i>The best result of the top 10 European countries</i>	6.11	6.40	98.2	45.1	148.7	144.0	100.0	6.89	5.20
<i>Average result of the top 10 European countries</i>	5.95	5.84	93.2	37.8	130.0	103.0	99.7	6.62	4.60

 Indicators whose score is below the average result of the selected (Balkan) countries

Source: WEF, 2017

Table 2 also gives an overview of the TTCI scores for the analysed group of countries and it can be concluded that the leading Balkan country in terms of the competitiveness of the tourism sector is Greece. When it comes to the ICT readiness, the results are quite heterogeneous. Slovenia

is the leader in three indicators (ICT use for business-to-business transactions, Individuals using Internet, Quality of electricity supply). Bulgaria has the best value of Internet use for business-to-consumer transactions and Active mobile broadband Internet subscriptions. Greece is leader according to Fixed broadband Internet subscriptions/100 population. Montenegro is leader according to Mobile phone subscriptions/100 population. Finally, Mobile network coverage rate amounts 100% in three out of ten Balkan countries (Bosnia and Herzegovina, Bulgaria and Croatia).

#### **b) Examination of the interdependence between ICT readiness and tourism competitiveness**

The importance of ICT readiness for the tourism competitiveness of Balkan countries is examined by determining the interdependence between scores of indicators within ICT readiness pillar and the TTCI. Given the available size of the sample, Spearman's rank correlation coefficient is chosen as an adequate indicator. This indicator belongs to a group of non-parametric indicators, whose application does not require the fulfillment of certain assumptions (first of all, the normality distribution) which requires the calculation of parametric indicators (Janković-Milić, 2016, p. 79). The calculated values of the Spearman's rank correlation coefficient between the selected variables are shown in Table 3.

It can be concluded that positive interdependence is observed among all the analysed indicators within the ICT readiness pillar and the TTCI. A high positive statistically significant correlation is observed between Fixed broadband Internet subscriptions/100 population and the TTCI (correlation coefficient of 0.964) and between Quality of electricity supply and the TTCI (correlation coefficient of 0.661). Moderate positive correlation is observed between the TTCI and following indicators: ICT use for business-to-business transactions, Internet use for business-to-consumer transactions, Individuals using Internet, Active mobile broadband Internet subscriptions/100 population. Low, but also positive interdependence is recorded between the TTCI and Mobile phone subscriptions/100 population, as well as between the TTCI and Mobile network coverage rate.

Table 3: *Values of the Spearman's rank correlation coefficient*

		TTCI
ICT use for business-to-business transactions, 1-7	Correlation	0.503
	Coefficient	
	Sig. (2-tailed)	0.138
	N	10
Internet use for business-to-consumer transactions, 1-7	Correlation	0.345
	Coefficient	
	Sig. (2-tailed)	0.328
	N	10
Individuals using Internet, %	Correlation	0.309
	Coefficient	
	Sig. (2-tailed)	0.385
	N	10
Fixed broadband Internet subscriptions/100 pop.	Correlation	0.964(**)
	Coefficient	
	Sig. (2-tailed)	0.000
	N	10
Mobile phone subscriptions/100 pop.	Correlation	0.297
	Coefficient	
	Sig. (2-tailed)	0.405
	N	10
Active mobile broadband Internet subscriptions/100 population	Correlation	0.382
	Coefficient	
	Sig. (2-tailed)	0.276
	N	10
Mobile network coverage rate, % of pop.	Correlation	0.116
	Coefficient	
	Sig. (2-tailed)	0.749
	N	10
Quality of electricity supply, 1-7	Correlation	0.661(*)
	Coefficient	
	Sig. (2-tailed)	0.038
	N	10
TTCI	Correlation	1.000
	Coefficient	
	Sig. (2-tailed)	.
	N	10

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: *Authors (SPSS Statistics 19)*

Since the results of the correlation analysis point to the great importance of ICT readiness for the competitiveness of Balkan countries' tourism, a

more detailed analysis of critical ICT related factors requiring improvements is needed.

### c) Systematization of critical indicators within the ICT readiness pillar in the Balkan countries

By benchmarking analysis of the data presented in Table 2, it is possible to systematize critical indicators in the field of ICT readiness in the Balkan countries that require improvement. Each country should first apply corrective measures and make improvements in indicators in which it deviates from the average of the comparable (Balkan) countries (indicators of the first level of priorities), and then the target should be the average value of the ten best ranked European countries (indicators of the second level of priorities) (Krstić & Stanišić, 2016, p. 102).

Table 4: *Specification of the indicators within the ICT readiness pillar according to the priority of improvements in the observed countries*

Country	Indicators of the first priority level - the benchmark is the average of the Balkan countries	Indicators of the second priority level - the benchmark is the average of the top 10 European countries
Albania	I <sub>1</sub> , I <sub>2</sub> , I <sub>3</sub> , I <sub>4</sub> , I <sub>5</sub> , I <sub>6</sub> , I <sub>8</sub>	/
Bosnia and Herzegovina	I <sub>1</sub> , I <sub>2</sub> , I <sub>3</sub> , I <sub>4</sub> , I <sub>5</sub> , I <sub>6</sub> , I <sub>8</sub>	/
Bulgaria	I <sub>3</sub> , I <sub>8</sub>	I <sub>1</sub> , I <sub>2</sub> , I <sub>4</sub> , I <sub>5</sub> , I <sub>6</sub>
Croatia	I <sub>1</sub> , I <sub>2</sub> , I <sub>5</sub>	I <sub>3</sub> , I <sub>4</sub> , I <sub>6</sub> , I <sub>8</sub>
Greece	I <sub>1</sub> , I <sub>2</sub> , I <sub>5</sub> , I <sub>6</sub>	I <sub>3</sub> , I <sub>4</sub> , I <sub>8</sub>
Macedonia, FYR	I <sub>1</sub> , I <sub>2</sub> , I <sub>4</sub> , I <sub>5</sub> , I <sub>6</sub> , I <sub>7</sub> , I <sub>8</sub>	I <sub>3</sub>
Montenegro	I <sub>1</sub> , I <sub>2</sub> , I <sub>4</sub> , I <sub>6</sub> , I <sub>7</sub> , I <sub>8</sub>	I <sub>3</sub> , I <sub>5</sub>
Romania	I <sub>3</sub> , I <sub>4</sub> , I <sub>5</sub> , I <sub>8</sub>	I <sub>1</sub> , I <sub>2</sub> , I <sub>6</sub>
Serbia	I <sub>1</sub> , I <sub>2</sub> , I <sub>3</sub> , I <sub>4</sub> , I <sub>8</sub>	I <sub>5</sub> , I <sub>6</sub>
Slovenia	I <sub>5</sub> , I <sub>6</sub> , I <sub>7</sub>	I <sub>1</sub> , I <sub>2</sub> , I <sub>3</sub> , I <sub>4</sub> , I <sub>8</sub>

Source: *Authors*

Albania, Bosnia and Herzegovina and Macedonia are the worst positioned Balkan countries in terms of ICT readiness. That is why they do not have, or have a small number of indicators of the second priority level, since they are far from the results achieved by the leading European countries in this field. After these countries, Serbia and Montenegro are the following according to the weakness of performance and achievements in the field of ICT readiness. Relatively good performance is recorded in Bulgaria, Croatia and Slovenia.

If the position of Serbia is considered, it can be concluded that a greater number of indicators within the ICT pillar which require improvement can be separated in Serbia. Priority in Serbia should be given to improving the following indicators: ICT use for business-to-business transactions, Internet use for business-to-consumer transactions, Individuals using Internet, Fixed broadband Internet subscriptions/100 pop., Quality of electricity supply. After their improvement, in order to reach European standards in this field, Serbia should focus on achieving better results in the field of Mobile phone subscriptions and Active mobile broadband Internet subscriptions.

## **Conclusion**

Information and communication technologies have changed and constantly change the way of life and work in modern conditions. Their influence is evident in all spheres of life and all sectors and industries. The role of information and communication technologies is particularly important in the tourism sector as an information intensive sector. In tourism, information and communication technologies find a wide field of use in all business segments. They are important both for the tourists and for the carriers of the tourist offer. Considering the wide range of use of information and communication technologies in the tourism sector, it is justified to study and measure the contribution of their efficient use to the level of tourism competitiveness.

The paper examines the impact of the level of ICT readiness on the level of tourism competitiveness in selected groups of countries. The analysis has shown that the leading European countries in the field of ICT readiness, countries identified as countries of good practice, simultaneously record significant results in the field of tourism competitiveness. The Balkan countries are the other analysed group of countries. The results of the benchmarking analysis point to the significant lag behind of these countries when it comes to ICT readiness for the leading European countries. However, regardless of this fact, the results of the correlation analysis indicate that ICT readiness is an important factor of the tourism competitiveness of the Balkan countries.

This initiated the need to examine the critical indicators in the field of ICT readiness in Balkan countries that require improvement in order to achieve a higher level of tourism competitiveness. Except Bulgaria, Croatia and Slovenia, which have relatively good results, a large number

of indicators have to be improved in all Balkan countries and must be a priority in the future functioning of policy makers in technology and tourism development. It can be concluded that the worst results in this field are recorded by Albania, Bosnia and Herzegovina and Macedonia. Serbia also does not have a satisfactory level of ICT readiness. The use of Internet in business transactions, as well as the individual use of the Internet and the quality of electricity supply are fields that require priority action and improvement in Serbia.

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