Open Government, Social Media and Western Balkan Countries[1]

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ABSTRACT

This article analyses the presence and activity on the field of social media in the countries that belonged to the same state in the past: Bosnia and Herzegovina (BIH), Kosovo, Montenegro, Serbia, the Former Yugoslav Republic of Macedonia – these named as Western Balkan Countries (WBCs) – and, Slovenia and Croatia as EU member states. The authors have analysed the official profiles of the respective countries on social media and calculated the Facebook Assessment Index (FAI) for WBCs, and Croatia and Slovenia as a benchmark. The results show that Twitter and Facebook are the most used social media. In WBCs group, the FAI index could not be calculated for BIH and Serbia, while the other two countries had high index values. Benchmark countries have lower values but they are significantly highlighted by individual sub-indices. The governments of the researched countries mostly publish promotional information about their work. Consequently, they have a relatively small number of friends/followers/subscribers and comments/shares/likes on social media. Therefore, these countries fail to use the full potential of social media to increase visibility and transparency of their work and to ensure communication channel for idea and information exchange between government and citizens, making the public policies design more inclusive and increasing trust between government and citizens. The findings provide an insight into the nature of activity on social media in WBCs. While FAI scores show that WBCs do not lag far behind established benchmarks, the research proves that some of the weights proposed in the literature and used in the calculation of FAI index are too simplified to adequately evaluate posts on the Facebook pages. Hence, this article contributes above all to the awareness regarding further potentials and the interdisciplinary aspects of stately social media usage, in theory and practice alike.

Keywords: open government, e-participation, social media, Facebook, Twitter, Western Balkan, benchmark

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1 Introduction

An emerging development of Web 2.0 technologies, specifically social media, caused a significant shift in everyday usage of technology. Kaplan and Haenlein (2010, p. 61) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of "User Generated Content". As most of the authors stressed, social media have significantly changed the way how people communicate to each other (Kietzmann et al., 2011; Solomon and Schrum, 2010; Song, 2010) by allowing them to actively design content through cooperative participation and permanent connection (Wirtz et al., 2014). Kaplan and Haenlein (2010) defined the following social media categories: blogs, collaborative projects, social networking sites, content communities, virtual social worlds and virtual game worlds.

For the needs of presented research, the authors decided to analyze only social networking sites (SNSs). As a web-based services, SNSs enable individuals to create their public or semi-public profile within a bounded system, a list of users (friends) with whom they want to share a connection and to view and traverse their list of connections and those made by others within the system (Boyd and Ellison, 2007). They are social media tools designed to facilitate the creation and maintenance of social relations. Today, some of the most popular social network sites are Facebook, Twitter, LinkedIn, and Google+.

Since social media offer the richness of interactions, they are fostering the involvement at the individual level providing potential for true collaboration (Srivastava, 2016). Governments and public agencies recognized the potential of social media and started to use them around 2009 (Klang and Nolin, 2011). Since then, they have tried to harness social media's potential for public purposes and the fulfillment of the open government promises (Gunawong, 2015).

Although there is an overall agreement that former USA president Obama with his *Memorandum on Transparency and Open Government* directed the implementation of the Open government plans by federal agencies (Orszag, 2009) and had huge merit in the popularization of the term open government, the concept itself is not new. The first written reference dates back to 1957 when Parks (1957) published "The open government principle: applying the right to know under the Constitution." Later, in the 1970s, the British government promoted several initiatives aimed at achieving more information freedom and more access to government's activity and, therefore, at reducing opacity (Chapman and Hunt, 2006).

While OECD defines Open Government as a "transparent, accessible and responsive governance system, where information moves freely both to and from government, through a multitude of channels" (OECD, 2009: 8), according to Evans and Campos open government "is widely understood as the leveraging of information technologies to generate participatory, collaborative dia-

logue between policymakers and citizens" (Evans and Campos, 2013: 173). The basic idea of the open government concept is to increase citizen trust into the government through transparency, participation, and collaboration (Janssen et al., 2012; Lee and Kwak, 2012; Reddick and Ganapati, 2011, Wirtz and Birkmeyer, 2015, United Nations, 2014). In Table 1 is summarized what transparency, participation and collaboration mean in the context of open government.

Table 1: Open government principles and related concepts (Gascó, 2013)

Principle	Related concepts
Transparency	Information access; Accountability Legitimacy and trust in government
Participation	Consultation and deliberation with citizens Participation in decision-making processes Participation in public policy design
Collaboration	Interoperability Co-production (Social) innovation

In 2010 the European Commission (EC) Directorate General for Communications Networks, Content and Technology (DG CONNECT) launched the *Digital Agenda for Europe* (European Commission, 2014) with the aim to support the open government initiative and to foster citizen participation and engagement by getting the most of digital technologies, particularly social media (Karakiza, 2015).

The political instruments for implementation of the Digital Agenda are the eGovernment Action Plans that should advance the modernization of public administrations across the European Union. The Digital Single Market Strategy for Europe (DSM) announces the launch of the new eGovernment Action Plan for 2016-2020. The main purpose of the new Plan is to remove existing digital barriers to the Digital Single Market and to prevent further fragmentation arising in the context of the modernization of public administrations. The final goal is that by 2020, public administrations and public institutions in the European Union should be open, efficient and inclusive, providing borderless, personalized, user-friendly, end-to-end digital public services to all citizens and businesses in the EU (European Commission, 2016).

Open data and open action are two essential tools which government can use to foster transparency, participation, and collaboration, e.g., to put into life main open government principles. Open data refers to data available in standardized, structured and machine-readable formats and that are guaran-

teed to be freely available over time. Open action means the use of web 2.0 tools and, particularly, of social media and blogging (Gascó-Hernández and Fernández-Ple, 2014).

However, despite huge potential of social media in providing open government, the governments generally fail to exploit them to the full capacity. The research presented in this paper try to answer the following question: what is the situation regarding use of social media as a tool for ensuring open government in transition countries. In this case, those countries are Western Balkans countries that belonged to one state in the past (Bosnia and Herzegovina, Kosovo, Montenegro, Serbia and the Former Yugoslav Republic of Macedonia). The authors decided to analyze those countries because of a similar level of economic development and reforms in government institutions. The main research question is whether and how the WBC governments use social media to foster open government. Also, the results of research can be used for analyzing these countries related to the context of open government, and for the evaluation of previously taken activities on transparency and collaboration with citizens. Although governments of chosen countries accepted social media as a communication channel, they used them mostly to publish promotional information about their work, while two-way communication with citizens is still missing.

1.1 Literature review

Although most of the authors agree that social media have a huge potential in addressing the open government challenge (Bonsón et al., 2012; Evans and Campos, 2013; Lee and Kwak, 2012), the governments still struggle with implementation of social media. According to (Wirtz et al., 2017) the scientific literature related to the use of social media as a tool that fosters open government can be divided into three groups (Table 2) regarding implementation process and maturity, social media deployment and use and coproduction factors and benefits.

Table 2: Short literature review according to Wirtz et al. (2017) classification

AUTHORS (YEAR)	RESEARCH ORIENTATION
1. Implementation process and maturity	
Dadashzadeh (2010)	Social media usage at local, regional, and national public authorities (governments) should be the result of strategic planning at all levels.
Mergel and Bretschneider (2013)	They suggest that the implementation and use of social media applications follows a three-step process: from experimental and informal, via informal standards, to formalized policies.
Lee and Kwak (2012)	They provide a maturity model on social media for open government. They propose a sequential development of open government principles with increasing social media-based public engagement. These studies outline the technological and functional development stages and implementation processes.
Criado and Rojas (2012)	The use of social media by public administrations is an expanding and multidisciplinary phenomenon.
Landau (2011); Lindsay (2011)	Social media's attributes (immediacy, ubiquity, and availability) make them very useful in sharing, especially in times of crises or emergency situations
Picazo-Vela et al. (2012)	Public administrations use social media with different purposes: to carry out recruiting tasks, to reach citizens and other stakeholders, to share information with other public organizations, to promote citizen participation in public issues or to improve transparency.
2. Social media deployment and use	
Sandoval-Almazan and Gil-Garcia (2012)	Address the development of local government portals in Mexico regarding collaboration and participation. They showed that only a fifth includes tools for interaction and participation, concluding that open government initiatives should be supported by social media
Bonsón et al. (2012)	Analyze the use of Web 2.0 and social media within local governments in the European Union. They concluded that social media implementation shows a heterogeneous picture and that the full potential of social media is not exploited.
Unsworth and Townes (2012)	Analyze social media used by the United States Department of Agriculture. Their key outcomes are that social media are not used in a way that promotes open government.
Katz and Halpern, 2013; Ma, 2013; Riarh and Roy, (2014)	Empirical studies are dealing with the adoption of social media in an open government context of different countries. The studies show relatively low social media adoption rates and unsatisfactory utilization of installed applications
Bryer (2011)	Analyzes challenges of the deployment of social media in the context of public participation. The study emphasizes the importance of considering multi-stakeholder relationships instead of unidirectional or asynchronous communications ways
3. Coproduction factors and benefits	
Meijer's (2011)	The study highlights the role of virtual communities for networked coproduction in the public sector.
Linders (2012)	Focuses on the coproduction factor and emphasizes the importance of citizen coproduction in the delivery of public services in the age of social media.
Chun and Cho (2012)	Study the implementation and outcomes of a social media participation platform that is used for citizen participation in policy decision-making in Korea.

This short literature review presented in Table 2 shows that the authors are aware of the importance of social media for citizen collaboration and as a tool that can foster transparency and participation. The authors recommend implementing social media within open government initiatives, but they stressed the necessity to better exploit advantages and disadvantages of social media (e.g., Bryer and Zavattaro, 2011; Chun and Cho, 2012; Linders, 2012).

Regarding research related to Western Balkans countries, the ReSPA (Regional School of Public Administration) together with its E-Government Network members and respective regional and international experts conducted two comparative studies. The first one was conducted in 2013, and it was devoted to e-government in the Western Balkan region. The second one, follow up study - "From E-toOpen Government" was made in 2015.

The results of the last study showed that Bosnia and Herzegovina is performing less well than the regional average on both e-government and open government. Namely, BIH had relatively well results referring to transparency, but less well on collaboration and poorly on participation. Regarding the Former Yugoslav Republic of Macedonia (FYRM), it is similar to BIH, performing less well than the regional average on e-government, but it had an exceptional performance as a leader on transparency and a good performance on participation in the context of open government. According to this study, Kosovo is the weakest of the six participants in both e-government and open government. As opposed to the other WBC, Kosovo started later and still has huge political and institutional challenges. The study showed that Montenegro is a regional leader in both e-government and open government. Montenegro is doing extremely well in participation and very well in collaboration compared with the average, but related to transparency has only an average score. Regarding Serbia, the study showed the average level of both e-government and open government. Serbia has very well results related to transparency and participation, but it has a lack of any real efforts regarding collaboration (ReSPA, 2015).

The ReSPA studies showed that, in spite of all challenges, the WBC try to catch up with developed countries related to both e-government and open government. In line with that efforts, the researchers from the WBC have become more interested in analyzing the use of social media as a tool for fostering open government in their countries (Mabić et al., 2017; Rexepi et al., 2016; Đurić-Atanasievski and Bobar, 2016; Budinoski and Trajkovik, 2012).

1.2 Open government initiative in Western Balkans countries

The previous literate review shows that the governments all over the world have become aware of the potential of social media in reaching more transparent, collaborative and participant government. That was the main driver in establishing the Open Government Partnership (OGP) as a multilateral initiative that aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new

technologies to strengthen governance. The Open Government Partnership formally started in 2011, when eight founding governments (Brazil, Indonesia, Mexico, Norway, the Philippines, South Africa, the United Kingdom and the United States) endorsed the Open Government Declaration and announced their country action plans. Since 2011, OGP has welcomed the commitment of 67 additional governments to join the Partnership (OGP, 2017).

In its current strategy, OGP defined that its "*vision is that more governments become more transparent, more accountable, and more responsive to their own citizens, with the ultimate goal of improving the quality of governance, as well as the quality of services that citizens receive*" (OGP, 2016: 2).

The analysis of the first five OPG's years showed that the national OGP process has helped countries to establish institutional mechanisms that give continuity and legitimacy to an open government reforms, made dialogue and co-creation of regular features of the interactions between OGP reformers, and initiated reforms that change the status quo and benefit citizens (OGP, 2016).

However, there are significant differences by OGP's membership countries related to establishing necessary institutional mechanisms as prerequisites to open government reforms and in achieving government's transparency, partnership, and collaboration. Table 3 presents a current status in OPG by WBC, except Kosovo which is not a member of OGP.

Table 3: Open government partnership – WBC status

Joined	No. of Commit-ments	No. of theme covered	Action Plan Thematic focus (themes that governments have focused on in their commitment development)	Status in OPG
Bosnia and Herzegovina				
2014	0	0	Bosnia and Herzegovina did not submit National Action Plan	The government of Bosnia and Herzegovina has a new deadline till August 31, 2018, to submit a two-year national action plan ending on June 30, 2020
Montenegro				
2011	56	0	20% Conflicts of interest 18% Legislation and Regulation 14% Private sector	Inactive (The Government of Montenegro has not submitted its new NAP) Montenegro has now acted contrary to the OGP process for three consecutive action plan cycles: 2014, 2015 and 2016
Serbia				
2013	27	11	71% Legislation and Regulation 57% Public participation 50% Public service delivery	Second National Action Plan 2016-2018 is posted
The Former Yugoslav Republic of Macedonia				
2011	120	22	47% e-government 32% Legislation and Regulation 29% Subnational	National Action Plan 2016-2018

Source: https://www.opengovpartnership.org/participants
[Accessed: March 21, 2018].

As it is visible from Table 3, there are substantial differences between WBCs in status in the OGP. The situation is slightly different from the ReSPA research from 2015. Namely, in the ReSPA study, Montenegro was a leader in both e-government and open government (ReSPA, 2015), but currently has inactive status in the OGP because it did not submit obligatory a two-year National Action Plan on Implementation of the Open Government Partnership Initiative since 2014 and did not cover any of committed themes. As expected, BIH only signed a partnership, without any defined nor covered committed themes. In addition, BIH did not submit a two-year National Action Plan on Implementation of the Open Government Partnership Initiative until now.

2   Methods

The empirical research included the government websites of WBCs: Bosnia and Herzegovina, Kosovo, Montenegro, Serbia and the Former Yugoslav Republic of Macedonia. These states belonged to one state in the past and today have a similar level of economic development and reforms in government institutions. Except for these countries, the analysis was carried out for Croatia and Slovenia as a kind of benchmarks. These counties are already members of the European Union, but share the same past with WBCs (former Yugoslavia). It is interesting to compare them with WBCs in order to see if there are any differences, e.g., if the EU membership influenced their progress in the use of social media in government.

Table 4 shows a list of countries included in research and their governments' web addresses.

Table 4: List of countries included in research

Country	Official website of the Government
Bosnia and Herzegovina (BIH)	http://vijeceministara.gov.ba/Default.aspx?langTag=hr-HR&template_id=91&pageIndex=1
Kosovo	https://www.rks-gov.net/sr-latn-cs/pages/fillimi.aspx
Montenegro	http://www.gov.me/naslovna?alphabet=lat
Serbia	http://www.srbija.gov.rs/
The Former Yugoslav Republic of Macedonia (FYRM)	http://www.vlada.mk/
Croatia	https://vlada.gov.hr/
Slovenia	http://www.vlada.si/

Source: authors' preparation.

An analysis of links to social media platforms on their governments' websites was conducted.

Activities related to the content that WBCs' governments publish on social network sites were analyzed through two aspects. It was investigated whether the links to social network sites were available on the official WBCs' websites and whether these links were valid and active. If the links were not found on the home page, it was checked whether they were available on the contact page. Availability of WBCs' web pages on social network sites was also checked directly by searching on the social networks sites.

Basic characteristics of official SNS profiles of the governments (numerical indicators available on the social network sites and published content) were analyzed on the most common social networks sites. The analysis was conducted during March 2018.The descriptive statistical analysis was performed

about the adoption and use of each social media application by the government of Western Balkans countries.

Additionally, the Facebook Assessment Index (FAI) of the researched WBCs' governments was calculated. FAI is adapted according to Miranda et al. (2013) and uses three categories to evaluate the essential information on a selected Facebook page: popularity, interactivity, and content (Miranda et al., 2013; Malhotra, Singh, 2016).

For measuring popularity, two indicators are available on FB pages: a number of followers (or fans) of their pages and number of persons talking about the site (Michaelidou et al., 2011; Miranda et al., 2013; Malhotra, Singh, 2016). The analysis used a number of followers (NF). Since researched countries have a different number of population, as a corrective factor for calculation of indicators necessary for FAI is used number of population (N) - data available on the Eurostat (the official website of the Statistical Office of the European Union. According to available data on the Eurostat website, the number of population for researched WBC on 1.5.2018. was as follows: BIH 3515982, Montenegro 622359, Serbia 7001444, FYRM 2075301, Croatia 4105493, Slovenia 2066880.

In line with input parameters, the popularity index (PI) is calculated according to formula [1].

$$PI = \frac{\frac{NF}{N}}{max\left(\frac{NF}{N}\right)} \ [1]$$

Interactivity is measured by activity (number of comments, shares or likes) with current and potential friends, in the case of a government with citizens. Miranda et al., (2013) and Malhotra & Singh (2016) analyzed the level of interactivity through number of adjusted indicators: 1) Number of wall posts made by the government in the last 7 days; 2) Average number of "likes" per post, calculated from the last 10 posts; 3) Average number of comments per post, calculated from the last 10 posts; 4) Average number of shared posts, calculated from the last 10 posts.

However, the authors think that the period of 7 days is very short and that the number of posts can significantly vary because of different events. Because of that, the authors decided to conduct the analysis for the first five months of the year 2018 (151 days in total). The sixth month (June 2018) is excluded purposely because of FIFA World Cup in Russia

The following parameters were used for the calculation of interactivity:

1) Number of wall posts made by the government in the first 151 days (NWP);

2) Mean number of "likes" per post, calculated from the151 days (MNL);

3) Mean number of comments per post, calculated from the 151 days (MNC);

4) Mean number of shared posts, calculated from the 151 days (MNS).

Based on the listed parameters, Interactivity (IV) is calculated according to the formula [2].

$$IV = \frac{\left(\frac{NWC}{max(NWC)} + \frac{\frac{MNL}{NF}}{max\left(\frac{MNL}{NF}\right)} + \frac{\frac{MNC}{NF}}{max\left(\frac{MNC}{NF}\right)} + \frac{\frac{MNS}{NF}}{max\left(\frac{MNS}{NF}\right)}\right)}{4} \quad [2]$$

Content sub-index provides a measure of the quantity of content items available through Facebook to the citizens. Evaluating only the presence/absence of certain information as an indicator of "quality" probably may not be the best alternative, but it is the solution proposed in the literature to avoid the use of subjective factors (Miranda et al., 2013). In building index of content value for government, 12 content items (CI) are analyzed: location, phone, address, e-mail, web address, additional contact information, video, photos, related pages, links to other social networks, the sites they like, reviews. Each item included in category available on a government Facebook page is marked by 1, so the maximum score was 12 points and minimum zero. A content score of a particular government is calculated as the percentage of items that a government FB page contains related to the total number of possible items. In line with that, content sub-index (CV) is calculated according to the formula [3].

$$CV = \frac{\sum_{i=1}^{12} CI_i}{12} \quad [3]$$

The final index value is a weighted sum of the scores obtained in each of these categories. Facebook Assessment Index can be calculated according to the following mathematical expression:

$$FAI = (w1 x PV) + (w2 x IV) + (w3 x CV) \quad [4]$$

PV, IV, and CV represent popularity value, interactivity value, and content value respectively. The weights (w) for each category were obtained from a Miranda et al. Delphi study, and the following were the assigned weights: popularity 25%, interactivity 40%, and page content 35% (Miranda et al., 2016). Miranda et al proposed the weights after performing a Delphi between experts in social networks (Miranda et al., 2016). The specified weights Miranda et al. (2018) were used to analyze Facebook activities of the local authorities in USA, UK and Spain.

Respecting the specified weights, the authors calculated FAI index according to formula [4a].

$$FAI = (0.25 x PV) + (0.40 x IV) + (0.35 x CV) \quad [4a]$$

3 Results

Table 5 shows social network sites where the analyzed countries have official pages. Data related to Kosovo are not found, so Kosovo is excluded from this analysis.

Table 5: Use of SNS across governments

	BIH	Montenegro	Serbia	FYRM	Croatia	Slovenia
Facebook	●*	●*		●	●	●
Twitter	●	●	●	●	●	●
Flickr				●	●	●
YouTube	●			●	●	●
Instagram				●	●	●
LinkedIn					●	
Google+		●				

Note: ● link available on government official websites;
*the profile founded by additional search (Google or SNS search);

Source: authors' preparation.

It should be stressed that the search on Facebook for specific countries offers profiles that look as official, but neither one has a note that confirms that it is an official profile. Also, some of the profiles in their description have statements that resemble official government portal (description of one of the founded profiles of the Government of the Republic of Serbia on Facebook is Education Website). Official profiles of the countries included in the research are in local language, except the Government of the Republic of Slovenia which has two official profiles, one in Slovenian and other in English.

The results of the conducted research show that WBCs have a significant lag in using SNS compared to neighboring countries, Croatia and Slovenia, which are members of the EU. Croatia and Slovenia have official profiles on six SNS, while most of the WBCs have one to two SNS, except FYRM, which has profiles on five SNS. Regarding the links to SNS on official websites, BIH has two links, Montenegro and Serbia have one, FYRM has five, while Kosovo has no links to SNS. Additional search on Google and specific SNS showed that Montenegro and BIH have official profiles on Facebook although they are not specified in the official websites of these countries.

The analysis of the link accessibility to SNS on official websites of researched countries gave some interesting results. Namely, on the websites of Montenegro and Serbia governments exists the option of eGovernment. Website of Montenegro government has a link to Open Government Partnership site. RSS (*Really Simple Syndication*) – as an option which notify logged users about new posts founded at the official websites of the Kosovo, Montenegro and Serbia governments. At the website of the Council of Ministries of Bosnia and

Herzegovina exists logo for e-Government, but clicking on it nothing happens. At the same website on the menu exists option eGovernment which offers two possibilities: the sitemap and the sessions, but under sessions, there is no any information.

Regarding the fact that it was founded that most of the researched countries have an official profile on Twitter and Facebook, a detailed analysis of the official profiles on SNS was conducted only on Twitter and Facebook.

Table 6 shows numerical data of official Twitter profiles.

Table 6: Numerical characteristics of official profiles on Twitter and numerical analysis of the last 30 tweets

	BIH	Montenegro	Serbia	FYRM	Croatia	Slovenia
Tweets	783	3947	2711	10,7 K	58,5 K	16,4 K
Following	349	291	120	177	19,3 K	10,2 K
Followers	807	8293	12,5 K	6840	168 K	63 K
Likes	2	1526	207	269	5553	303
Last activity	29.3.2018	1.4.2018	28.3.2018	2.4.2018	2.4.2018	30.3.2018
Joined	Apr. 2016	Dec. 2011	Jun. 2012	Sep. 2011	Dec. 2011	Jun. 2009
Photos/videos	360	1867		830	6666	1477
Lists		1		1	15	
Moments						1
Period of the last 30 tweets (Days)	16.3.-29.3 (14)	23.3.-1.4. (10)	26.1.-28.3. (62)	28.3.-2.4. (6)	30.3.-2.4. (4)	29.3.-1.4. (4)

Note: Analysis completed on 03/04/2018;

Source: authors' preparation.

According to the dates of last posts and the analysis of the time for the last 30 tweets on Twitter, it can be concluded that researched governments relatively actively use their Twitter profiles. The only exception is Serbia because it realized its 30 Tweets in considerably longer time compared to other countries (Serbia through two months, while other countries through two weeks). The activities on other SNS are not indicative. The posts are especially rare on YouTube and Google+.

The analysis of the activity and attractiveness of analyzed governments on SNS, based on numerical data available on official SNS profiles, shows that Bosnia and Herzegovina has considerable lag compared to other countries. This lag refers to the number of followers, number of following, number of likes and shares, except for the number of posts. The reason for this lag can lay in the fact that the Council of Ministers of BIH is present on Twitter just

since the April 2016, while the governments of other countries have been on Twitter more than five years.

Table 7 shows numerical data of official Facebook pages for analyzed countries for period from 1.1.2018. until 31.5.2018.

Table 7: Numerical characteristics of official Facebook pages

	BIH	Montenegro	Serbia	FYRM	Croatia	Slovenia
People like this	61	16791		29092	155519	3700
People follow this	64	17026		29579	152680	3828
Last activity		29.5.2018		31.5.2018	29.5.2018	30.5.2018
Number of posts with						
Likes		234		300	27	143
Comments		144		149	27	88
Shares		192		257	26	138
Mean number of ... per post						
Likes		193.87		57.04	253.46	22.02
Comments		10.26		9.05	83.93	6.94
Shares		7.96		7.19	21.42	6.75

Note: Analysis completed on 31/05/2018.

Source: authors' preparation.

The sub-indices for popularity, interactivity and content are calculated using data from table 7, and formulas [1], [2], [3].Here is the example of calculation for Montenegro:

$$PI(Montenegro) = \frac{\frac{17026}{622359}}{0.03719} = 0.7356$$

$$IV(Montenegro) = \frac{\left(\frac{234}{300} + \frac{\frac{193.87}{17024}}{0.01139} + \frac{\frac{10.264}{17024}}{0.00181} + \frac{\frac{7.9635}{17024}}{0.00176}\right)}{4} = 0.5943$$

$$CV(Montenegro) = \frac{10}{12} = 0.8333$$

FAI indices for WBCs are calculated on the basis of obtained results for sub-indices, according to the formulas [4], [4a] and [4b].

Table 8 shows results for all sub-indices and FAI index for analyzed WBCs for period from 1.1.2018. until 31.5.2018.

Table 8: Numerical characteristics of official Facebook pages and FAI scores

	BIH	Montenegro	Serbia	FYRM	Croatia	Slovenia
Popularity	0.0005	0.7356	-	0.3833	1.0000	0.0498
Interactivity	-	0.5943	-	0.3690	0.1545	0.7455
Content	0.3333	0.8333	-	0.8333	0.5000	0.5000
Scores (weights according Miranda et al.)						
FAI		0.7133		0.5351	0.4868	0.4856

Note: Analysis completed on 02/04/2018.

Source: authors' preparation and calculation.

The results in Table 8 show that it was possible to calculate the FAI score just for two WBCs (FYRM and Montenegro). Namely, the first analysis of the existence of official profiles on social networks founded that the government of Republic of Serbia has no official profile on Facebook, while the Council of Ministers of Bosnia and Herzegovina has two profiles, one marked as official but without any posts or activities, so it was impossible to calculate the index of interactivity. According to that, Serbia was excluded from any calculations, while for BIH only two FAI components were calculated. The highest FAI value (weights according Miranda et al.) of 71.33% is scored by Montenegro, while FAI of FYRM is 53.51%. Comparing with results of Croatia and Slovenia, both EU countries have higher FAI index. It is interesting that analysis of FAI in the range from 0 to 100%, showed that both benchmarking countries (Croatia and Slovenia) have result less than 50%. The reason for that can be the results of specific FAI components. The index of popularity is highest for Croatia and lowest for Slovenia, while WBCs are somewhere between these countries, although Montenegro has almost twice higher value for the index of popularity than FYRM. Slovenia has the highest interactivity score followed by Montenegro, while FYRM and Croatia have relatively low scores for interactivity, especially Croatia. Related to the content score, it is important to stress that both WBCs (FYRM and Montenegro) have a higher score than Croatia and Slovenia.

Generally, the content analysis of SNS's profiles showed a high diversity of posts. Namely, the governments have different portfolios, duties, and responsibilities, so it makes sense that the posts are uneven.

Published content mostly includes messages with announcements or schedules about activities to be held by the government or some of their institutions or public agencies. Above all, there is the information about the meetings of governments' officials with officials from foreign countries, as well as the information about participation at different events. All that information belonged to the promotion. It is clear that citizens should be informed of these activities, but for them, it is more important the information about concrete activities that governments take and which influence their quality of work and life in the specific country. It should stress that on the Twitter pro-

file of BIH government one can find agendas for some sessions of the Council of Ministries of BIH, while that is not the case with other WBCs.

4   Discussion

The presence of WBCs' governments on SNSs showed significant lag related to Croatia and Slovenia. The exception is FYRM. One of the reasons for higher activity of Croatia and Slovenia on SNSs can be an easier implementation of the good EU practices when the country is already in EU (easier access to EU funds, obligation to follow EU guidelines, etc.).

One of the biggest problems of WBCs is lack of systematic approach, i.e. lack of the strategy related to the use of SNSs in governments, or if strategy exists, the lack of its implementation.

As it was presented in Introduction, although researched WBCs (except Kosovo) are members of OGP, there are substantial differences between them related to the status in OGP. Serbia and FYRM have made some progress, while status of Montenegro is inactive and BIH only signed partnership without submitting the two-year National Action Plan on Implementation of the Open Government Partnership Initiative.

However, the results related to the interactivity should be taken with caution. Generally, all four researched countries whose governments are presented on Facebook have a lot of posts, but the content of these posts is very uneven which significantly influence the reaction of their followers. By that, in the further research, the FAI index should be calculated by the type of posts (content). In that case, the result of interaction will be more precise. However, in the calculation of interactivity, only the number of likes to post is calculated, although Facebook today enables the expression of different emotions through liking (cry, anger, love, wonder, etc.). It means that the index of likes should be corrected by emotions.

5   Conclusion

The analysis of WBCs status in OGP (Table 3) shows that there are differences related to establishing necessary institutional mechanisms as prerequisites to open government reforms and in achieving government's transparency, partnership and collaboration (FYRM and Serbia are leaders, Montenegro lags, BIH is at the beginning, while Kosovo is not member of OGP). The research shows that there are differences among WBCs related to the use of SNS in reaching the goals of OGP. Since the main goals of OGP are promotion and increase of governments' transparency, there is a lot of space for the use of SNS that have a huge potential in addressing the OGP goals. The analysis of SNS profiles of researched governments shows that SNS can provide a high level of transparency, citizens informing and interaction with government. The results of the research show that the government of the researched WBCs are

presented on SNS, some of them more (FYRM), some of them less (Serbia, BIH), depending on the analyzed social network. However, these countries do not lag far behind established benchmarks – Croatia and Slovenia. Moreover, as FAI scores show, the content score for FYRM and Montenegro is higher than for Croatia and Slovenia.

However, it is important to stress that presented research cannot be used to make any general conclusions. The main reason for caution lay in the fact that analysis was not done according to the types of posts (that can directly provoke, or not, the reaction of followers), but just according to the frequency (only numerical/quantitative data was used). It means that the authors did not analyze the content of post, i.e. the type of post. In future research all activities (like, comment, share) should be analyzed in the context of the type of post, because the response of citizens is not the same if the post is about higher prices for some goods/services, or the post is about new laws/regulations, or is about visit of foreign countries delegations, or about sport success and etc.

According to the current situation, researched countries have no any or have poorly developed and/or unimplemented Plan for SNS activities, meaning that most of WBCs started their SNS story following the general principle "everybody is present on SNS, so we also should be there." But, the analysis of WBCs' status in OGP (Table 3) shows that there are differences related to establishing necessary institutional mechanisms as prerequisites to open government reforms and in achieving government's transparency, partnership and collaboration (FYRM and Serbia are leaders, Montenegro lags, BIH is at the beginning, while Kosovo is not member of OGP).

In the presented research, the authors in calculation of FAI index used weights defined by Miranda et al. (2013). However, for the future analyses authors propose conducting of the research for defining weights for all categories of indices before FAI calculation. For example, the sub-index content was calculated only according to the number of items like address, phone numbers and working time, which can be found at official government Facebook page. The authors' opinion is that such type of content should be less important than popularity, but it has to be confirmed.

Inevitably, the question is, are governments posting on SNS the contents that are important to their citizens or themselves? On the one hand, transparency means that data and information related to the activities of government should be presented to citizens, but it is not enough. In order to achieve open governance, the government should find a balance between transparency, participation, and collaboration. Unfortunately, that is not the case with WBCs because participation and collaboration are still huge challenges for their governments. The publishing of just promotion activities and the announcement of events makes an impression on WBCs citizens that all SNS activities are in

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service of government's official promotion and for the sake of keeping their positions and benefits.

A SNS is just one of the different social media that can support governments in the implementation of open government initiative. As OPG proposed, WBCs should adopt a strategic approach related to the implementation of SNS in order to establish institutional mechanisms that will provide continuity and legitimacy to open government reforms.

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