

# Usage and role of open government data and public policies of 54+ citizens e-Inclusion issues

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**Abstract.** *The Digital Transformation era has forced upon some specific terms related to the digital data. Very popular buzzwords nowadays are Open Data (OD) and Big Data (BD). Considering that issue, this paper presents the importance of public policy documents openness and the role of open government data accessibility on the example of e-Inclusion issues of 54+ public policy documents.*

*The authors consider the openness and accessibility of public policy documents at EU level, national level and regional level. Openness of public policies will be tested by measuring availability for anyone to access, possibility of digital search the content, alter and share.*

*This research has been inspired by low rate of 54+ e-Inclusion in many EU counties. The authors shortly give the introduction of the organization and hierarchy of public institutions, the conceptual model of public policy documents considering multiannual period of 6 or 3 years. The research starts by analyse of the public policy documents of European Commission multiannual policy declaration, strategies, annual plans and annual reports. As the example of the national and regional level will be used Croatian case of national government public documents (strategies, plans, reports) and regional government documents.*

*In accordance with the results of the analysis the authors recommended how to improve accessibility and ensure more efficient reuse open government public documents and data in public sector.*

**Keywords.** Active ageing, public policy, e-Inclusion, open data, big data

## 1 Introduction

Living surrounded by digital technologies necessarily leads to changing habits in social, business as well as in private life. Being able and ready to accept, use and exploit available digital services is a matter of multidisciplinary approaches solving the problem of e-Inclusion.

E-Inclusion refers to the situation where everyone in society can participate in the information society. This requires affordable access to technologies, the accessibility and usability of ICT tools and services, and the ability and skills of all individuals to use these tools (by EUROSTAT).

The public administration force and public policy are recognized as cause of digital inequalities on macro level as it is presented on the integrated model of digital divide (Yu, 2018, pg. 10). The Open Data (OD) concept, Big Data (BD) and the public policies are interdependent. Public policies cover the legality of making public policies open and legality of collecting social BD (smart city concepts), and on the other hand BD can make public policies much more directed to solving noted social problems. Regarding BD, OD and open government the overlaps of all three terms is Large public government datasets like Census, Healthcare. The overlap between BD and OD is large dataset for scientific research, social media or other non-government sources. The overlap between open government and OD is public data from state, local, federal government (eg budget data).

OD in Europe, is an indicator of Digital Economy and Society Index (DESI) and since 2018, is based on open data policy, open data portals, open data impact and open data quality. The score for 2019 is published on <https://ec.europa.eu/digital-single-market/en/digital-public-services-scoreboard>. Ireland, Spain and France performed well on this measure, scoring more than 80%. On the other hand, Hungary, Slovakia, Malta and Portugal underperformed, with scores below 50%.

The motivation for this research is based on gap between opportunities of living in Digital Transformation era, using e-services and being e-Included of 54+ and real rate of e-Inclusion presented by EUROSTATs e-society research. The example is selected because of disbalance between the Digital Transformation possibilities and personal ability to use the e-products and e-services or information published on Internet, and co-financed and supported by European Commission. Further, the question is what will happen with Digital Transformation initiative if only 35% of those aged 55-74 and 30% of the retired and the inactive possess basic skills (in 2019) (European Commission, DESI – Human capital, 2020, p. 4).

There are many aspects of defining term “public policy”. In this article for the term public policy authors use:

- As a noun public policy means the fundamental policy on which laws rest, especially policy not yet enunciated in specific rules. The public policy according the aspect of law means the principle that injury to the public good or public order constitutes a basis for setting aside, or denying effect to, acts or transactions.<sup>1</sup>
- Croatian law on strategic planning and development management system of the Republic of Croatia<sup>2</sup> defines the public policy as “the focus of action by public authorities on objectives that respond to public needs or problems over a given period”.
- Public policy as a noun by Merriam Webster<sup>3</sup> defined as government policies that affect the whole population.
- Public policy means by which way a government maintains order or addresses the needs of its citizens through actions defined by its constitution. Public policy is generally not a tangible thing but rather is a term used to describe a collection.

Developing public policy begins with a set of guiding principles and by identifying issues, goals and objectives. In the analysis phase, the issues are carefully considered, and various possible courses of action are proposed. The list of recommendations is then discussed by the policy makers and a decision is made based on the available information. Technical openness, as of machine-readable format, and legally openness, as clearly licensed as open, is criteria for reuse and analysis of published documents for scientific, private and community purposes.

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<sup>1</sup><https://www.dictionary.com/browse/public-policy>

<sup>2</sup>[https://narodnenovine.nn.hr/clanci/sluzbeni/2017\\_12\\_123\\_2798.html](https://narodnenovine.nn.hr/clanci/sluzbeni/2017_12_123_2798.html)

<sup>3</sup><https://www.merriam-webster.com/dictionary/public%20policy>

Nowadays, public administration faces challenges in modernising the process of policy analysis by using BD analytics. Shi (Shi et al., 2017, p. 559.) have studied the impact of BD on policy analysis. According to the mentioned research authors concluded that: (1) there is a broad consensus that BD will drive innovation in public policies; (2) BD analytics can provide accurate, proactive and participatory policy analysis but with a number of risks (data privacy, data misuse and bias, inequality), (3) BD analytics can provide information for problem prediction, condition analysis and thus help policy makers targeting the primary agenda.

Public policy tends to be an OD that could be available to stakeholders. On the other hand, public policy must be evidence-based in general, but nowadays the actual sources are BD platform. The authors tell more about two perspectives of data in the contexts of public policies in the next chapter.

To explore the above arguments, this paper is structured as follows. The next section present short review of open government data. This is followed by review of domains: e-Inclusion facts and numbers on EU, national and regional level and public policy system and hierarchy. In section four is presented research methodology. The findings of public policies on official web portals and Open data public government portals is presented in section five. The last section presents the conclusion and recommendation.

## 2 Open government data

Scientists, practitioners and foundations (Sunlight Foundation, 2014), (WWW Foundation, 2018) have been recently considered bidirectional relations between concepts OD and BD and public policies.

European Parliament and Council have accepted the Directive (eu) 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies.

In the Digital Agenda for Europe, the Commission announced that public sector websites should be fully accessible by 2015, thereby reflecting the Riga Ministerial Declaration of 11 June 2006 (EP and EC, 2016, p. 4, (17)). (EP and EC, 2016). Additionally, the accessibility of public documents builds the rights of persons with disabilities and of the elderly to participate and be integrated in the social and cultural life of the Union. (EP and EC, 2016, p. 4, (23)).

The European Parliament and the Council of the European Union (2019) accepted the Directive (EU) 2019/1024 of The European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information (recast)

Schrier (2014, p. 12-27) has presented USA experience of Open Government Data concept regarding benefits, strategies and use of OD.

The development of OD timeline in United Kingdom government has been presented by Halonen (Halonen, 2012., p. 4-5). The process starts 1966. Many authors have considered transformation process from old fashion buiocratic public government to modern, open, transparent government.

“Public sector information represents an extraordinary source of data that can contribute to improving the internal market and to the development of new applications for consumers and legal entities. Intelligent data usage, including their processing through artificial intelligence applications, can have a transformative effect on all sectors of the economy.” (The European Parliament and the Council of the European Union, 2019, p. 2).

Reale (2014) presents the opportunities and differences of open government data policies between EU countries.

Azzone (Azzone, 2018, p. 116 – 120) has reviewed the BD and public policies like opportunities and challenges. Regarding the opportunities some questions are opened, like: equality of all users, fake news and opportunistic behaviours, privacy rights and general interest, the role of competence of public management as well as accountability and responsibility of public managers.

Studinka (2018) have regarded the issues of paving the way for evidence-based governance by using BD in the Public Policy Process. The Public Policy Process consists of planning phase, design phase, delivery phase and continuous evaluation phase. The conclusion of research is “While the planning phases dominated by descriptions and examples of social media used for agenda-setting, the uses described in the design phase often have a predictive element. The focus of big data use in the delivery and evaluation phases was on real-time data, providing immediate feedback.”

Maciejewski (2017, p. 123) considered the big data methods that may be used in three approaches. Historical and Real-time models deliver real-world data, then Predictive model present the information about the future state with the relevant degree of certainty. The role of BD in public policy is systematized as: public supervision for identifying irregularities (legal incomppliance and taking responsive action; public regulation for regulating social conduct and shaping social relations; public service delivery including infrastructure (Maciejewski, 2017, p. 124).

Giest has regarded the Data-based policymaking frameworks. In the context of evidence-based policymaking have been raised two aspect of looking at that issues; first is the integration of BD in an existing institutional context and the second is capacity of individuals or government entities to be able to find and utilize data-based information. (Giest, 2017, p. 369-370).

Zuiderwijk (2019) has presented an overview of the OD policy-making papers published in the period

of 2014 – 2018. The researchers consider: 1) open data policy making and theory development; 2) open data policy making effects, and 3) open data policy-making from a multi-actor perspective.

E-Inclusion in general raises possibility of using e-services and e-goods and it has an influence on the collecting public open BD about any societal issues that has a digital solution for collecting digital data about behaviour. Especially, e-Inclusion of 54+ can give much more interesting information about behaviour of that part of population.

The European Commission, Directorate-General for Informatics has been taken the research about BD analytics in public policy making (Barbero, et.al., 2016).

### 3 Review of domains

In this chapter authors shortly present the facts about e-Inclusion, public policy documents and public policy institutions, to describe the framework for discussion.

#### 3.1 E-Inclusion issues facts and numbers

##### 3.1.1 EUROPEAN LEVEL

The Digital Economy and Society Index (DESI) is the composite index that summarises relevant indicators on Europe's digital performance and tracks the progress of EU Member States in digital competitiveness (<https://ec.europa.eu/digital-single-market/en/desi>, accessed on July 18<sup>th</sup> 2020). The DESI consists of five dimensions: 1) connectivity – fixed broadband, mobile broadband, fast and ultrafast broadband and prices; 2) human capital – Internet user skills and advanced skills; 3) Use of Internet – Citizens’ use of internet services and online transactions; 4) Integration of digital technology – business digitalization and e-commerce; 5) Digital public services – e-Government and e-health.

According the Digital Economy and Society Index 2020 Human capital only 35% of those aged 55-74 and 30% of the retired and the inactive possess basic e-skills.

Regarding the DESI report – Usage of the Internet – “The share of people in the EU who have never gone online decreased again in 2019, although the current share of 9.5% warrants further action. Despite convergent trends, large differences remain across Member States. The share of people in the EU not using the internet fell in nearly all Member States in 2019. Sweden, Denmark, the Netherlands and Luxembourg are the countries where the share is the lowest (below 3%). The ratio is still large in Bulgaria (24%), Greece (22%), Portugal (22%) and Croatia (18%). The Member States reporting the largest reductions were Ireland with a drop of 7 percentage points, and Spain and Malta with drops of 4

percentage points. There is a high number of non-users among people with no or low education levels (24%), among those aged between 55 and 74 (23%), and the retired and the inactive (26%).”

As Active ageing measures that includes the encouraging the e-Inclusion as it is defined in Agenda 2030 about Sustainable Development – one of SD goals is „Provide inclusive and equal quality education and promote lifelong learning opportunities for all people“ (United Nations (2015). - Goal 4).

Even the relevant institutions take care about e-society and Digital Transformation of economy and society the value of key indicators are still under the politically planned level. To be classified as low skilled, an individual has to have carried out activities from only one of the four Digital Competence dimensions considered (information, communication, content-creation and problem-solving) (The EC, 2019). Basic skills mean that an individual has basic skills in at least one dimension, but no skills in none. To be classified as above basic, the individual must score above basic in all dimensions.

### 3.1.2 NATIONAL LEVEL – Croatian case

The e-Croatia Strategy 2020 (Ministry of Public Administration, 2017) as national strategic document considers the term e-Inclusion as it stands “For the moment, the Croatian legislation does not define the need to ensure accessibility of websites in the public sector. The Website Development Guidelines for the Central Government Portal require that greater accessibility is ensured in line with the Web Content Accessibility Guidelines WCAG 2.0” (Ministry of Public Administration, 2017, p. 34).

Croatian Open government data policy has been accepted and published in July 2018 by the Government of the Republic of Croatia (2018).

### 3.1.3 REGIONAL LEVEL Koprivnica Krizevci County case (NUTS3)

The Croatian counties have development strategy documents. As an example, in this research has been used the Development strategy for the period of 2014 – 2020 (Koprivnica Krizevci County, 2016). The e-Inclusion issues are not regarded in the mentioned county strategic document.

## 3.2 Public policy system and hierarchy

Public policy is the principled guide to action taken by the administrative executive branches of the state/region/county/local authority with regard to a class of issues, in a manner consistent with law and institutional customs. There has recently been a movement for greater use of evidence in guiding policy decisions, as it is mentioned in previous chapter. Proponents of evidence-based policy argue that high quality scientific evidence, rather than

tradition, intuition, or political ideology, should guide policy decisions.

In this chapter will be presented public policy documents and creating procedure and public policy law regulation. The authors consider European practice of public policy law regulation. The European Council (EC) provides orientations and general political priorities. The operating period is five year and at the beginning the Commission sets out the priority areas to be focused on. The priority areas are derived from the Council’s strategic agenda and from discussions with political groups of the European Parliament. For the five years’ operating period of Commission the Priorities are set in President’s political guidelines.

Actual Commission priorities have been set for the period 2015-2019 and they consist of 10 points as follows: 1) Job, growth and investment; 2) Digital single market; 3) Energy union and climate; 4) Internal market; 5) A deeper and fairer economic and monetary union; 6) A balanced and progressive trade policy to harness globalization; 7) Justice and fundamental rights; 8) Migration; 9) A stronger global actor; 10) Democratic change. Every year, the President of the Commission presents the achievements of the Commission during the previous year and the forthcoming priorities or initiatives for the year to come in the speech on the State of the Union.<sup>4</sup> The strategy is carried out by Commissions annual action plan. The annual action plan is based on declaration of the President of the Commission presented to European Parliament. The plan of action for the next 12 months is set out in the Commission work program, by which political priorities will be turned into concrete actions. The Programme is considered by other EU institutions and national parliaments.

For all major legislative and policy defining initiatives, Commission departments prepare an impact assessment to analyse the likely economic, environmental and social effects of the proposals. A list of planned Commission initiatives and a list of adopted Commission initiatives is updated regularly and sent to other EU institutions to help them organise their own activities<sup>5</sup>.

Planning and reporting by departments mostly are conducted at the end of the year by presenting annual activity report on their performance in achieving their objectives. After the budget year ends, all departments produce an annual activity report on their performance in achieving their objectives. These

<sup>4</sup> State of the Union speech 2018 - by Commission President Jean-Claude Juncker

[https://ec.europa.eu/commission/sites/beta-political/files/soteu2018-brochure\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/soteu2018-brochure_en.pdf)

<sup>5</sup> Work programme for 2019, [https://ec.europa.eu/info/publications/2019-commission-work-programme-key-documents\\_en](https://ec.europa.eu/info/publications/2019-commission-work-programme-key-documents_en)

reports are collated in a synthesis report communicated to the European Parliament and the Council. As of 2016, the synthesis report is included in the annual management and performance report for the EU budget.

**Table 1.** The terms and concepts of public policy law

Level	Attributes
EU	<ul style="list-style-type: none"> <li>- EU's overall political strategy is developed jointly by its institutions: the European Parliament, European Council, Council of the European Union, and European Commission. (Priorities 2014 – 2019.)</li> <li>- The Commission's annual action plan → Commission work programme. It describes how the political priorities will be turned into concrete actions. Other EU institutions and national parliaments also comment on the programme.</li> <li>- Commission departments produce strategic and management plans showing how they will contribute to the Commission's priorities and setting clear objectives and indicators for monitoring and reporting – according to 10 priorities set in Overall political strategy.</li> </ul>
National	Strategic plan multiannual, budget plan (3-year period), annual report
Regional/County	Strategic plan multiannual, budget plan (3-year period), annual report

### 3.3 Public government institutions organisational review

The organisational parts on the observed governance level are:

- EU LEVEL (53) = Directorate general (31) + Service department (16) + Executive agency (6)
- CROATIAN NATIONAL LEVEL = Ministries (20) + Executive agency + Funds + State offices and others (6+5) [\*On the July 15<sup>th</sup> 2020., after that was reorganization of public policy bodies in Croatia.]
- REGIONAL LEVEL (Koprivnica Krizevci County Croatian case) = Counties administrative units (8) + Agency (2) + Institutes (1)

The activities declared to the entities on EU level are policy making and implementation, managing programs, publications, archives, statistics on the governance level as a support to the publicity. Regarding the e-Inclusion in general and specifically the e-Inclusion of 54+ the key issues and topics delegated to the entities are related with human capital and digital issues, specified as: **Communications**

**Networks, Content and Technology; Employment, Social Affairs and Inclusion.** Even the e-Inclusion is a matter of all Commission departments, directly or indirectly, it has influence to many indicators measured in DESI.

## 4 Research Methodology

The research methodology of this article consists of checking:

- *the accessibility of public policy documents about e-Inclusion of 54+ on the official national web portals (not open data) Croatian case,*
- *the accessibility of public policy documents about e-Inclusion of 54+ on the open data national web portals of member states of EU,*
- *the ability of using machine search of key words on the open data national web portals of member states of EU to find the public policy documents about e-Inclusion of 54+*
- *content analyse to check the occurrence of “e-Inclusion” (English and Croatian language) in the mentioned documents at different level of governance.*

The term **web accessibility** in the scientific and technical meaning is oriented to defining standards for different web components. Recently, the chronology of web accessibility standards developments and government directives have been researched and systematically reviewed by Moreno and Martinez (Moreno, Martinez, 2019).

According the phase 1 of testing, the authors conduct test of the public policy documents openness and accessibility about e-Inclusion issues.

The open government data portals support different kinds of file/data formats like PCAXIS, HTML, XML, KML, XLS, XLSX, GIS, DOC, WMS, WFS, PDF, CSV, ZIP, JSON, TIF, JPEG and so on. The structure of datasets can be defined or undefined (unstructured).

The maturity of openness is standardized marked from 5 stars to zero.

The variables that are considered according the research are: the availability of OD web portal, the number of accuracy of key word “e-Inclusion” as well as the local term for “e-Inclusion”, checking manually the content of documents that machine search was detected to determine the matching case of key word, possibility of setting the search criteria, multilingually of OD web portals, possibility to accessibility setting for users with disabilities, licence information, the documents format information and marks of openness rank of open data portal.

Regarding the research settings, the authors get results as it is described in next section.

## 5. Public policies on official web portals and Open data public government portals

The authors have tested openness of government public policies documents by searching official government web sites (not exactly specified as open data portal) and national open government data portals listed on the official web portal of European Commission.

### 5.1 The accessibility

The digital accessibility government of public policy documents on EU level is assured according to the web portal of European Commission (one stop shop). The organization of the document mentioned in Table 1 related to the EU level has very simple structure, it is easy to search and use. There is one common model of publishing the documents of all institutions as executive bodies of European Commission and European Council.

The digital accessibility of public policy documents on national Croatian governance level is achievable but not organized to be clear the hierarchy of public bodies and documents as it is on EU administrative bodies level. Each ministry has its own web domain, so there is no possibility to search all of them in one cycle. The user must be familiar with public administration organizational structure (to find all national institutions) to be able to find relevant documents.

During the research of the accessibility of strategic multiannual documents on Croatian regional level (20 counties and City of Zagreb) the authors have found that those are not accessible on the web for all counties for the period of 2014-2020. Some counties put the information on the official web portal that development strategy document is in the process of preparation and acceptance, some strategic documents are published in draft version so they can't be used as official because they are not accepted. Even the acceptance of multiannual documents is defined by national law there still exist the exceptions of applying that rule in the practice. On the other hand, the accessibility and openness of those documents is the next level problem that can't be solved if the documents don't even exist.

Public administration on national and regional level in Croatia have no single web spot for publishing the documents specified in Table 1. as EC has. Relatively often the administrative officers do not think that it is even important to do so because the interest of publicity for such documents is not developed enough.

### 5.2 Accuracy of "e-Inclusion"

Searching the term of e-Inclusion was conducted on July 18<sup>th</sup>, 2020 by using search tool on [https://ec.europa.eu/info/index\\_en](https://ec.europa.eu/info/index_en). Except the main key word "e-Inclusion" the search criteria were: Date – it was set to "all"; Language – one cycle of search was used "English" and another "Hrvatski"; File format: "All formats" (Web, Word, Excel, PDF, Power Point).

As the e-Inclusion is interdisciplinary term it can be additionally matched as it is presented in the following table.

**Table 2.** The number of contents analyse results of searching EC official web sites for appearance of the term "e-Inclusion"

Topic	EN *	CRO*
Business & industry	53	
Economy, finance and investment	624	524
Environment, food & natural resources	112	
EU in the world	134	
Functioning of the EU	1063	45
Health, Wellbeing & Consumer Protection	303	1
Infrastructure, research & innovation	187	2
Life & Rights in the EU	309	
Media, culture & languages in the EU	417	1
Others	870	
Social	2	4
Work & Education	1355	10

\*English/Croatian language; Source: made by authors

The official portal of national Croatian Government contains neither one case of accuracy term "e-Inclusion" or Croatian term "e-uključivost".

The official web page Koprivnica Krizevci County gives the same results.

The testing of the open government data national portals was conducted during the period from 1<sup>st</sup> till 6<sup>th</sup> of August 2020. All national open government data portals have been accessible at the moment of the test. As the key words for search have been used the term "e-Inclusion" and the translation to the national term for each member state as it is presented in the Table 3.

As it could be seen in the Table 3 the most of official national open data portals have no data about e-Inclusion. If the accuracy was over 10 the content was tested additionally, and the conclusion is that search algorithm gives the result that includes not just the exact key word than the other similar terms. The result of search is not satisfactory because there have been scored the documents that includes not just exactly the key word. Just Lithuania and Poland open government data portals have possibility of advanced

**Table 3.** The accuracy of keyword “e-Inclusion” on open data national portals of member states of EU

RB	OD portal	Accuracy of keyword on national language	Accuracy of "e-Inclusion"	Checking manually the results in (4)	Possibility of setting the research options	Multilingual	Multilingual content	accessibility settings
1	2	3	4	5	6	7	8	9
1	 <a href="https://data.gov.be">data.gov.be</a>	e-Inclusion = 0	No information to display		no	NL, EN, FR, DE	No, mostly structure of web	not found
2	 <a href="https://data.egov.bg/">data.egov.bg/</a>	електронното включване = 2 results found	No information to display		no	EN	No, mostly structure of web	not found
3	 <a href="https://data.gov.cz/english">data.gov.cz/english</a>	elektronické inkluze = 0 datasets found with query	0 datasets found with query: "e-Inclusion"		no	CZ, EN	No, just structure of web	not found
4	 <a href="https://portal.opendata.dk">portal.opendata.dk</a>	e-integration = 311 fundne resultater	309 fundne resultater		no	DK	-	not found
5	 <a href="https://govdata.de">govdata.de</a>	e-Inclusion = 0	Ihre Suche ergab leider keine Treffer		no	DE	-	not found
6	 <a href="https://opendata.riik.ee">opendata.riik.ee</a>	e-kaasatus = 0	Andmehulkade arv: 0		no	EN, ET	yes	not found
7	 <a href="https://data.gov.ie">data.gov.ie</a>	e-Inclusion = 3210	3,210 datasets found for "e-Inclusion"		no	EN	-	not found
8	 <a href="https://data.gov.gr">data.gov.gr</a>	ηλεκτρονική ένταξη = 0	944 σύνολα δεδομένων βρέθηκαν για "e-Inclusion"	not passed	no	GR	-	not found
9	 <a href="https://datos.gob.es">datos.gob.es</a>	e-Inclusión = 10	7 conjuntos de datos encontrados para "e-Inclusion"		no	ES, EN	No, just structure of web	not found
10	 <a href="https://data.gouv.fr">data.gouv.fr</a>	e-Inclusion = 314	314 jeux de données, 11 réutilisations, 45 organisations	not passed	no	EN, FR, ES	No, just structure of web	not found
11	 <a href="https://data.gov.hr">data.gov.hr</a>	e-Uključivost = 165 Rezultata	165 Rezultata		no	HR	-	not found
12	 <a href="https://dati.gov.it">dati.gov.it</a>	Inclusione elettronica = 0	32911 Dataset	not passed	no	IT	-	not found
13	 <a href="https://data.gov.cy">data.gov.cy</a>	Ηλεκτρονική ένταξη = No results were found.	No results were found. Please try another keyword.		no	CY, EN	No, just structure of web	not found
14	 <a href="https://opendata.gov.lt">opendata.gov.lt</a>	e-įtrauktis = 0	No results found for "e-Inclusion"		yes	LT	-	not found
15	 <a href="https://data.gov.lv">data.gov.lv</a>	e-iekļaušana = "105 datasets found for "e-iekļaušana"	92 datasets found for "e-Inclusion"		no	LV, EN	No, just structure of web	not found
16	 <a href="https://data.public.lu">data.public.lu</a>	e-Inclusion = 25 datasets	25 datasets; 2 reuses; 7 organizations	not passed	no	EN, FR	No, mostly structure of web	not found
17	 <a href="https://data.gov.mt">data.gov.mt</a>	Inkluzjoni elettronika = "Showing 0 to 0 of 0 entries"	No records to display according to the filtering criteria supplied and your authorised access permissions.		no	MT, EN	yes	-
18	 <a href="https://data.overheid.nl">data.overheid.nl</a>	e-inclusie = 0 zoekresultaten	e-Inclusion=0 zoekresultaten		no	NL	-	-
19	 <a href="https://data.gv.at">data.gv.at</a>	e-Inklusion=10	e-Inclusion =10		no	AT	-	-
20	 <a href="https://danepubliczne.gov.pl">danepubliczne.gov.pl</a>	e-Integracja = No results found for "e-Integracja"	No results found for "e-Inclusion"		yes	PL, EN	No, just structure of web	letter, theme
21	 <a href="https://dados.gov.pt">dados.gov.pt</a>	Inclusão eletrônica = Sem resultados. Tente novamente utilizando outros termos.	No results found, try to be less specific.		no	FE, EN, ES	No, just structure of web	not found
22	 <a href="https://data.gov.ro">data.gov.ro</a>	e-incluziune = "120 datasets found for "e-incluziune"	128 datasets found for "e-Inclusion"		no	RO, EN, IT, FR, ES, DE	No, just structure of web	not found
23	 <a href="https://podatki.gov.si">podatki.gov.si</a>	e-vključenost = "2469 najdenih zbirk"	2469 najdenih zbirk		no	SI, BUT USE GOOGLE	yes	letter, theme
24	 <a href="https://data.gov.sk">data.gov.sk</a>	e-Inclusion = No datasets found for "e-Inclusion"	No datasets found for "e-Inclusion"		no	SK, EN	No, mostly structure of web	not found
25	 <a href="https://avoindata.fi">avoindata.fi</a>	e-Inclusion = No datasets found for "e-Inclusion"	No datasets found for "e-Inclusion"		no	FI, SE, EN	Yes	not found
26	 <a href="https://opnadata.se">opnadata.se</a>	E-integration = "No matching results"	No datasets found for "e-Inclusion"		no	SE	-	not found

Source: made by authors during the period of 1<sup>st</sup> to 6<sup>th</sup> August 2020

search setting to search any word from the expression, all words, exactly these words or synonyms of mentioned words.

Multilingual open government data portal is available for 14 counties, so this is one of the possible reasons why the search score is not greater. Slovenia has a good solution of multilingual presentation of published content. Slovenian open government data portal includes Google translate module if the portal is open by Firefox or Google Chrome, so the content is usable globally.

The maturity rate of dataset openness is marked on Croatian open government data portals, Slovenian and Ireland. Slovenian and Poland open government data portal has the possibility to set the accessibility settings the font size or the contrast of colours for users with disabilities.

The results of analyse are presented in Table 3. The accuracy of keyword “e-Inclusion” on open data national portals of member states of EU.

## 6 Conclusion and recommendation

As the presented results of research talks the conclusion is simple that the topic of e-Inclusion in general, and neither of 54+ is not enough highlighted on official public policy documents published on official web portals or on open data official portals.

The importance of openness as well as the ability to reuse of public policy documents and data is reflected on the increase transparency, economic benefits and social benefits.

The European Union institutions pay a lot of attention to e-Inclusion as an important issue of human rights, but there still is a lot of things “to do” to get much more progress of getting nations e-Included, especially citizens who are 54+.

Raising awareness of being open and the importance of openness in terms of increasing the transparency of actions and decision-making process of public authorities and public sector is still the challenge.

Regarding the issues of demographic ageing in EU countries the EU policy is directed to active ageing measures and to inclusions in society, so the e-Inclusion is also the key topic nowadays. As it was researched the public policy documents related with e-Inclusion of 54+ are not open according to the data accessible standards on open government data national portals.

At the end the authors feel free to give some recommendations as it follows:

1. The topic of e-Inclusion of 54+ has to be much more included in public policy documents because it is the only systemic way that the problem of low e-Inclusion rate of 54+ can be solved.
2. The openness of open government data has to be implemented faster in the practice, not just

on the level of developing standards and creating the law regulation.

3. The multilingually solutions of open government data can improve their usability so the recommendation is to implement standardized modules for web content translation.
4. During the research of national official government portals, it has been noted that the searching process takes much more time than the searching of the EU level governance, because at the national level every public government body (ministry) use its own domain. So, it is impossible to search all sources in one cycle. Maybe it could be better to organize official web pages of all public institutions on common web domain.

The topic of e-Inclusion in general, and specifically of 54+, is still one of actual matter to research, as well as considering it from the point of public policies. The readiness of public policies for e-Inclusion of population 54+ and the awareness of policy makers will be considered in further research too. According the conclusion further research will be focused on using BD in creating public policies for e-Inclusion.

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