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**Internet media of local governments – social and legal implementation of
WCAG 2.0 requirements
A diagnosis of web accessibility and web usability**

KEY WORDS

web accessibility, web usability, local government media, the Internet

ABSTRACT

Polish municipalities act as the publishers of magazines and owners of electronic media, which often pretend to be the local news services. The heads of municipalities were not obliged by any regulations to create customized portals to web accessibility standards. In Poland the situation changed with the publication by the Council of Ministers on 12 April 2012 of the National Interoperability Framework. The document defined the minimum requirements for public records and exchange of information in electronic form as well as the minimum system requirements. This research makes an attempt to diagnose problems associated with the introduction of new regulations. It also highlights their social and legal conditions, with particular emphasis on web accessibility and related web usability of local resources in the internet media.

The every-day functioning of citizens and private and public institutions is more and more dependent on the Internet connections and devices based on advanced information-telecommunication (IT) technologies. The pace of the changes taking place may lead to adaptation issues among users. They can be observed in the ways of electronic communication, especially when using the Internet and the constantly appearing new services offered by the global web¹. Simultaneously, smartphones, applications, and communication platforms, which combine into the global network of computer connections, become the structure of our lives².

The dynamic changes taking place force upon the user a necessity to constantly adapt to communication technologies. It is demonstrated by the statistics showing the decrease in the number of people not using any IT technologies³. The application of the IT potential is not possible, however, without a systemic preparation, which should be curated by the state. The foundations of this system are legal and organisational structures as well as the construction of technological infrastructure.

¹ The term “web” will be used in the text as synonymous to “the Internet”.

² M. Castells, *Spoleczeństwo sieci* [Network society], Warszawa 2007, p. 65.

³ *Diagnoza społeczna* [Social diagnosis], ed. by J. Czapiński, T. Panek, Warszawa 2013, see chart 7.2.2, p. 325.

The availability of information resources on the Internet and their ease of use should be considered in a broader context than that of law and technology alone. It is associated with a complex of such social phenomena as digital divide and acquisition of digital competences. An important factor is the necessity of building an information society, able to skilfully navigate among digitized messages.

The Internet has contributed to a dynamic development of professional media created by private and state-owned or public institutions, as well as private individuals (both amateur and professional). Owing to the facility of creating messages, ability to reproduce them, and technically unlimited range, there are no significant barriers for the publication of any kind of content. Commercial media have adapted to the new, network landscape to a large extent. Authors of local government media in Poland are learning to move around this environment: the Internet has enabled the communes to initiate communication in a way entirely different from the one rooted in bureau consciousness.

A local government website serves many purposes nowadays. It is not only an official bulletin and e-government platform but also a tool for communicating with the inhabitant and promotional activities of the commune (tourism, economy, etc.). It is also the place where the local government officials publish content from their traditional media titles, creating services which make an increasingly better use of the global web potential.

Currently the holders of the websites – heads of communes, mayors, and presidents have to take into consideration the legal regulations for the elimination of barriers in web communication by implementing the WCAG 2.0 standards, or the necessary norms of access to on-line content (web accessibility) and the associated need to build useful websites (web usability) Taking into account the importance of this challenge, the research aim was defined as an attempt at diagnosis of the current state of local government web services: their social and legal conditions, readiness to implement the WCAG 2.0 requirements for communication and content published in communal web services. This was supported by the author's own research associated with the implementation of the web accessibility and usability component by local governments in Poland.

Social conditions

Effective use of the tools made available by the global web is not limited to using a web browser. In order to function in the real world today, it is increasingly more often necessary to know how the virtual world operates. This concerns such issues as finding and reading information efficiently, using web-based services, as well as the personal security of Internet

users (e.g., spam and the risk of misuse of one's personal information) or accountability for the content, such as using hate speech on the Internet (Pol. *hejtowanie*) or sharing files (Pol. *szerowanie*) associated with abusing intellectual property rights. These are the basic components which should be included in the digital education of citizens regarding the acquisition of the skill to use on-line tools and understand Internet communications. Paradoxically, in spite of the constant IT development, these skills have slightly decreased among Polish users of the Internet⁴. It is due to the increasing frequency of using computer just for surfing the web and abandoning activities which might increase one's digital competences (such as saving and transforming of materials obtained from the Internet)⁵. Studies show that Poland still comes below the average for OECD countries. This gap is widening in the group of elderly people⁶.

The deficit of competences is accompanied by the problem of digital divide, which is not defined unambiguously. It is commonly understood to concern people who do not have access to the Internet or modern forms of information exchange. It is a complex phenomenon, which can be classified according not only to social and technological but also economic and legal conditions⁷. There is a long list of factors affecting the digital divide: the lack of telecommunications infrastructure, disability, price barrier – that is, high cost of Internet access and purchase of appropriate equipment – resistance against technological novelties, characteristic of elderly people, insufficient competences – lack of the ability to use equipment and resources, lack of interest in or not seeing any advantages of IT. In general, digital barriers can be divided into hard (infrastructure, equipment) and soft ones (skills, motivation)⁸. Digital divide usually does not exhibit a clear paradigm but instead is an accumulation of certain social conditions, personality traits, and the increased significance (dynamics of change in) technology in every-day life⁹.

⁴ Ibidem, chart 7.3.1, p. 336.

⁵ Ibidem, p. 336.

⁶ *Umiejętności Polaków – wyniki międzynarodowego badania Kompetencji Osób Dorosłych (PIAAC)* [Skills of Poles: Results from the Programme for the International Assessment of Adult Competencies], Instytut Badań Edukacyjnych, Warszawa 2013, p. 19–21.

⁷ M. Szpunar, *Digital divide a nowe formy stratyfikacji społecznej w społeczeństwie informacyjnym – próba typologizacji* [Digital divide and new forms of social stratification in an information society: An attempt at typology], in: *Spoleczeństwo informacyjne* [Information society], ed. by K. Wódz, T. Wieczorek, Dąbrowa Górnicza 2007, p. 38–48.

⁸ More broadly in: D. Batorski, *Wykluczenie cyfrowe w Polsce* [Digital divide in Poland], in: "Studia BAS" 2009, no. 3, p. 227–228.

⁹ In such circumstances, the definition by the Organisation for Economic Co-operation and Development, which stresses the "gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the Internet". See: *Understanding the digital divide*, Paris 2001, p. 5.

Studies carried out in Poland show that the price of internet access and the cost to purchase the necessary equipment are not the main ingredients of digital divide. The number of people who lack motivation to use the web is disturbing¹⁰. Because of such an attitude the state, as the organiser and regulator, should pay special attention to the building of a society adapted to digital forms of communication, that is, information society. The creation of such a structure, based on the use of knowledge and broadly understood advantages of IT, has no future without an appropriate educational system. The implementation rate of new technologies is so high that the adaptation to digital environment is increasingly difficult, especially for the elderly. The every-day life, dominated by technological novelties, requires more time and energy to master constantly emerging facilities, which become an insurmountable barrier for some. The “digital consciousness is the gateway to information society”¹¹, the basis for the understanding of digital reality. An extremely important factor which determines overcoming the divide barrier is the adaptation of the utility functions of electronic media, that is, caring for the user-friendliness of IT tools mediating in the use of information and service resources of the web. This involves all content, including the content from traditional media (press, radio, television) adapted for Internet transmission.

Legal conditions

Access to public information is a foundation of democratic structures and transparency in the functioning of a state. The system is based on the constitutional rights of citizens: access to information and equal treatment by public authorities¹². This way, a citizen can participate in the exercise of power and, simultaneously, monitor the decisions being made. Modern information and communication technologies can greatly facilitate this.

The first webpages of offices began appearing in the mid-1990s, when the Internet can be said to have spread. However, there was no regulation of their construction, legibility, or accessibility. Only in 2001, when the Act on Access to Public Information was passed¹³, there was a provision in its art. 8 regarding the necessity of creating dedicated official internet sites, where the information about the activity of public institutions would be published. In January 2007, the regulation by the Minister of the Interior and Administration on the Public

¹⁰ *Diagnoza społeczna*, op. cit., see chart 7.1.8, p. 323–324, 340–341.

¹¹ M. Szpunar, *Spoleczeństwo informacyjne – problemy pomiaru i problemy definicyjne* Information society: Problems of measurement and definition], http://www.magdalenaszpunar.com/_publikacje/2006/mszpunar_spoinformacyjne.pdf [accessed: 5 Sep 2014].

¹² Art. 32, 51, 54, 61, 74 of the Polish Constitution.

¹³ Pol. *Ustawa o dostępie do informacji publicznej* of 6 September 2001, Dz.U. 2001 No. 112, item 1198.

Information Bulletin (Pol. *Biuletyn Informacji Publicznej – BIP*)¹⁴. It specified the structural requirements for BIPs. Such components of official websites as subject menus, database, and search module were pointed out. Art. 5 contains the first mention of the service being available 24 hours a day. In art. 6, it is stressed that “public information made available in a BIP cannot contain unexplained abbreviations except those which are commonly accepted and understood”. In these provisions one may find the first guidelines indicating the necessity to create user friendly, accessible, and useful official websites.

The situation changed with the publication by the Council of Ministers on 12 April 2012 of the National Interoperability Framework, or the minimum requirements for public records and exchange of information in electronic form as well as the minimum requirements for IT systems¹⁵. By the end of May 2015, all local government web services should be compliant with the appropriate level of WCAG 2.0 guidelines¹⁶.

WCAG 2.0 is a set of guidelines developed by entities involved in Internet activities associated in the World Wide Web Consortium (W3C)¹⁷. These guidelines, which concern web accessibility, have been accepted by the majority of EU countries¹⁸, including Poland. The Ministry of Administration and Digitization defines web accessibility as follows: “accessibility of a web service is when all users have full access to its content, can understand it, and convenient navigation allows for a logical and intuitive interaction with the service”¹⁹.

The WCAG 2.0 guidelines provide the so-called success criteria for web services (on three levels of conformance: A – basic, AA – expanded, AAA – full). For instance, in the case of audio and video materials, item 1.2.1 corresponding to the Level A (required by the Regulation²⁰) is explained as follows: “for all pre-recorded (not transmitted live) audio and video materials published on the website such as audio podcasts, mp3 files, etc. we have to provide an alternative description of the pre-recorded audio content”²¹. When it comes to

¹⁴ Rozporządzenie MSWiA w sprawie BIP, Dz.U. 2007 no. 10 item 68.

¹⁵ Dz.U. 2012, item 526.

¹⁶ Web Content Accessibility Guidelines. Polish documents use such terms as “wytyczne”, “wymagania”, “zasady”, and “standardy”, which is associated with the ambiguity of the English term “guideline”.

¹⁷ More broadly in: “Understanding WCAG 2.0”, <http://www.w3.org/TR/2013/NOTE-UNDERSTANDING-WCAG20-20130905/> [accessed: 1 Sep 2014].

¹⁸ *Standard WCAG 2.0*, <http://wcag20.widzialni.org/standard-wcag,m,mg,148> [accessed: 1 Sep 2014].

¹⁹ More broadly in: *Dostępność*, MAiC, <https://mac.gov.pl/dostepnosc> [accessed: 1 Sep 2014].

²⁰ Due to the length of the description, the author quotes only selected parts. Details can be found in Attachment 4 to the aforementioned Regulation. See also the description of guidelines in note 19.

²¹ *WCAG 2.0, Principle 1: Perceivable; 1.2.1 Audi-only and Video-only (Prerecorded) (Level A)*, <http://wcag20.widzialni.org/tylko-dzwiek-lub-tylko-wideo,new,mg,165,170.html,57> [accessed: 1 Sep 2014].

texts, the explanation of item 1.4.5 (Level AA) is: “graphics should not be used to present text if the same visual presentation can be conveyed by using only text”²².

The WCAG 2.0 standards mainly concern persons with (physical and legal) disabilities, 4.7 million of whom live in Poland (above 12% of the population²³). It should be stressed that introducing these guidelines will positively affect the reception of content by every person with visual impairments, hearing problems, reduced mobility associated with ageing of the organism, or limited understanding of published communication (due to lack of education or mental limitations). Compliance to these criteria by web services is also important to the persons with little skill in using computers, the Internet and, in general, the newest communication tools. Web accessibility features are close to the definition of web usability suggested by Jakob Nielsen, pioneer of methodology and web resource evaluation: “Usability is a quality attribute that assesses how easy user [of websites, now also of mobile applications – K.K.] interfaces are to use. The word "usability" also refers to methods for improving ease-of-use during the [website – K.K.] design process”²⁴. According to Nielsen, the most important components include learnability (the ease of accomplishing basic tasks the first time the project, i.e., website, is encountered), efficiency (once users know the design, how fast they can perform tasks), memorability (if users can remember, after a break from using the service, how to use it), errors (how often they are made, and how easily users can recover from them), and satisfaction (how pleasant the usage is)²⁵. These are universal principles which should be followed regardless of the advances in technologies used for Internet communication²⁶. The accessibility and ease of use of web services is perceived mostly through the lens of persons with disabilities, whereas usability is treated as part of the business requirements for commercial (company, marketing, even media etc.) portals.

The introduction of standards, especially concerning public (state) institutions, is necessary because of the rights of citizens to obtain and share information. Before the Regulation of 2012 came into force, there were no requirements established with similar

²² For example, a PDF file should be generated from text, not from a scanned (printed) version. Scanned PDF files cannot be read by screen readers for visually impaired people, <http://wcag20.widzialni.org/grafiki-tekstowe,new,mg,165,172.html,73> [accessed: 1 Sep 2014].

²³ *Raport wyników. Narodowy spis powszechny ludności i mieszkań*, GUS, Warszawa 2012, p. 63, http://stat.gov.pl/cps/rde/xbcr/gus/lud_raport_z_wynikow_NSP2011.pdf [accessed: 1 Sep 2014].

²⁴ More broadly in: J. Nielsen, *Usability 101: Introduction to usability*, <http://www.nngroup.com/articles/usability-101-introduction-to-usability/> [accessed: 1 Sep 2014].

²⁵ *Ibidem*.

²⁶ As Nielsen stressed, “the only constant is change.” J. Nielsen, *Designing Web Usability. The practice of simplicity*, New Riders 2000, p. 372.

precision. Still, it is difficult to imagine building an information society without creating rules which allow all citizen to participate in it.

Local government standards – the study

Local governments are publishers of press titles and hold concessions to broadcast radio and TV programmes, as well as programmes disseminated in IT networks. It is difficult to give the precise number of communal periodicals²⁷ due to non-compliance with the obligation to register titles²⁸ (communes may also apply to district courts to register web pages as periodicals²⁹), and failure to deliver the obligatory copies to the National Library (where they should be registered in the international system for identifying serial publications, managed by the National ISSN Centre). The number of local governments managing electronic media can be determined by querying the registers of National Broadcasting Council (Pol. *Krajowa Rada Radiofonii i Telewizji – KRRiT*)³⁰.

Some of the content available in communal media is now presented by the basic local government medium, that is, the official website, where audio and video materials are published as well as digitized periodicals (e.g., in the form of PDF files)³¹. It is a way to increase the popularity of local government websites and improve their usability level³². What should be stressed is that these sites should comply with WCAG 2.0 requirements as well.

²⁷ Researchers from University of Silesia attempted to determine the number of titles. Zob. P. Szostok, R. Rajczyk, *Komunikowanie lokalne w Polsce: O instrumentach polityki komunikacyjnej samorządów* [Local communicating in Poland: Instruments of local government communication policy], Katowice 2013, p. 45–47.

²⁸ See, e.g., the “Informator Ożarówski” [Ożarów Informer]. The communal authorities admitted that the published periodical was not registered; <http://www.ozarow-mazowiecki.pl/media-lokalne/informator-ozarowski-120?eprivacy=1> [accessed: 10 Feb 2015].

²⁹ Under the Act of 26 January 1984 on Press Law (Pol. *prawo prasowe*). See also: K. Kowalik, “Świętokrzyskie media samorządowe – cyberprzestrzeń nowym wyzwaniem” [Local government media in Świętokrzyskie: Cyberspace as new challenge], „Rocznik Bibliologiczno-Prasoznawczy”, vol. 6/17, Kielce 2014, p. 181, 185–186.

³⁰ Querying the list of concessions granted by KRRiT indicates that local governments registered 7 terrestrial radio broadcasting stations and 9 television programmes broadcasting through telecommunication networks. Whereas the query of the list of ICT operators and broadcasters shows that 7 of them distribute TV programmes through such networks. See: List of concessions – terrestrial radio broadcasting, List of concessions – ICT networks – Television, IT operators and broadcasters. Extract from the registry; <http://www.krrit.gov.pl> [accessed: 1 Sep 2014].

³¹ See the example of the Aleksandrów Łódzki commune, which publishes a newspaper and has a local government television, delivered via the municipal cable network. Materials are also available at the website of the office, <http://www.aleksandrowlodzki.pl/> [accessed: 20 Feb 2015]. See also the official television of the Municipal Office of Kielce, cf. the link to the channel in the YouTube.com service at <http://www.um.kielce.pl> [accessed: 1 Sep 2014]. See also notes 21 and 22.

³² A communal website is a standard nowadays, however, 0.6 % of all communal local governments do not have websites of their own but only the obligatory Public Information Bulletins. Based on a query of the of Local Government Territorial Address Database, <https://administracja.mac.gov.pl/adm/baza-jst/baza-teleadresowa-jst-7788,Bazateleadresowa-JST-do-pobrania.html> [accessed: 1 Sep 2014].

Holders of communal web services (heads of communes, mayors, presidents) strive to create information portals interesting to local communities. What appears in them are not only official communications but also bus, train, and coach timetables, working hours of medical care facilities, police stations, etc., thus realising the idea of open data use³³. There are also announcements of and reports from cultural, sport, and other events, containing text, photo, audio, and video messages. Even information which might seem to belong to the domain of commercial media is published there, such as stock exchange communications and news of events in the country and abroad. Local government on-line media aspire to be not only strictly official services but also regional horizontal portals³⁴. The size and type of communes (rural or municipal) are not relevant³⁵. Internet media of local governments strive to convey a message similar to the professional media, for instance, by employing their own editorial teams for on-line television³⁶. Therefore, they should seek to control the parameters, which enable web users to use services in line with the principles of web usability and accessibility of content.

A survey was used to diagnose the readiness of communes for new requirements, with a questionnaire published on the Internet. Email addresses from the database of the Ministry of Administration and Digitization were used. The link was sent to 2,478 communal local governments³⁷, which were verified in the case of receiving feedback from the server like “the email address does not exist” or “the mailbox is full”. In such cases, the link was sent again to the next email address indicated in the local government web service (communes were identified based on domain name from mail server messages). The questionnaire was anonymous, however, the person filling it could enter data allowing to identify the commune and, simultaneously, request the anonymization of the reply³⁸. This paper presents a part of the gathered data (the questionnaire comprised 75 closed, open, and semi-open questions

³³ Open data, that is, data which can be freely used and processed by everyone, provided the attribution of authorship is retained and they are further disseminated on the same basis; <http://opendatahandbook.org/en/what-is-open-data/index.html> [accessed: 10 Feb 2015].

³⁴ Horizontal portals are characterised by wide ranges of presented content, E.g., onet.pl, wp.pl, etc.

³⁵ Compare the websites: rural www.bircza.pl, with a link to a flight schedule, with urban-rural www.barlinek.pl; see also the malogoszcz.pl website [accessed: 2 Feb 2015].

³⁶ See the example from Krosno Odrzańskie: the website of the office contains a link to on-line television. According to the service checking domain owners, the TV address www.krosno24.tv has been registered by the Krosno Odrzańskie Commune; <http://whois.domaintools.com/krosno24.tv> [accessed: 20 Feb 2015].

³⁷ It was sent to rural, urban-rural, and urban local governments, and to towns/cities with county rights in October 2014. Due to the peculiarities of its local government system, the Capital City of Warsaw was excluded.

³⁸ The author's experience shows that communes are reluctant to respond to questionnaires even when the queries are directed based on the Law on Access to Public Information. When the results can be anonymised, they are more likely to answer questions which are sensitive from the viewpoint of local government authorities. However, forcing communes to respond under the Law on Access to Public Information Act could prolong the gathering of data by many months, incurring the risk of data becoming obsolete.

gathered in 21 topic blocks). Replies to the questionnaire came from 9.5% of local governments³⁹.

It seems that, for communes, the first step before implementing the new regulations should be the verification of existing ones, a kind of inventory of assets. Urban local governments and urban with county rights replied to the question if the website of the office was already compliant with WCAG 2.0 requirements⁴⁰ that 63% of them implemented appropriate solutions. Whereas more than half of the respondents from urban-rural and rural communes (55.2%) replied that their websites did not meet the guidelines from the regulation. For an initial diagnosis of their websites, local governments can try automatic online validation. Such tests can be performed using special web services, free of charge⁴¹. You need only enter a website address to have its code automatically checked for correctness. The generated report indicates errors (in HTML, CSS sheets, etc.⁴²) but does not evaluate the quality of menus, use of clear language to describe the structure of the service, or ease of navigation and reaching information. The problem with automatic validation becomes relevant when the website is verified by control authorities (such as the Supreme Audit Office⁴³, Pol. *Najwyższa Izba Kontroli – NIK*), which also use on-line tools. Therefore, there may be discrepancies after the control of the website, which was pointed out by the Polish Ombudsman⁴⁴.

Should a web service be declared user friendly, it must be usable; therefore, it is necessary to conduct tests. Asked if the office checked the website for web usability⁴⁵, 55.6% of urban communes with county rights and urban ones responded “Yes”, and 44.4% “No”. It seems that presidents are more aware of the necessity to check the type of content and the

³⁹ The low return rate may be due to the short time of survey (a week) and the time period it was conducted, i.e., directly before local government elections (a month before the 1st round of voting, which took place on 16 November 2014).

⁴⁰ The question included the following explanation: “it is adapted to the requirements for persons with disabilities defined in the Regulation of the Council of Ministers of 12 April 2012 on National Interoperability Networks, minimum requirements for public records and exchange of electronic information, and minimum requirements for ITC systems”.

⁴¹ An example of an automatic on-line validator: <http://validator.w3.org/> [accessed: 1 Sep 2014].

⁴² Basic languages used in website design.

⁴³ See, e.g., the NIK report from the control of the Bielsko-Biała website, p. 18, <http://www.nik.gov.pl/kontrola/wynikikontroli-nik/kontrola,12705.html> [accessed: 1 Sep 2014].

⁴⁴ See: *Dostępność witryn internetowych instytucji publicznych dla osób z niepełnosprawnościami. Analiza i zalecenia* [Accessibility of websites of public institutions for persons with disabilities: Analysis and recommendations], “Biuletyn Rzecznika Praw Obywatelskich 2013”, *Zasada równego traktowania*, “Prawo i Praktyka” [Bulletin of the Polish Ombudsman 2013] no. 11, p. 17, <http://www.brpo.gov.pl/sites/default/files/Biuletyn%20Rzecznika%20Praw%20Obywatelskich%202013%2C%20Nr%209%20C5%B9r%C3%B3d%C5%82a.pdf> [accessed: 1 Sep 2014].

⁴⁵ The question included the following explanation: “Usability, or, for example, intuitive design of a service, ease of finding information, clarity of content. Does not refer to accessibility for persons with disabilities”.

ways in which it is conveyed, as opposed to the heads of urban-rural and rural communes, the vast majority of whom are not interested in it. Only 23.6 respondents from urban-rural and rural communes declared having performed appropriate tests (76.4% responded “No”).

The verification of usability and correctness of a web service requires user experience tests (e.g., combined with eye tracking), that is, tests based on the analysis of actual user behaviour. Each of them can assume a different role, e.g., a client of the office who wants to learn about the changes in local law; an inhabitant of the commune who wants to read the report from the harvest festival and find himself in the pictures from on-line gallery; an entrepreneur looking for places for investment or information on tax deductions; a tourist who tries to find a restaurant and a hotel close to the local attractions in which she is interested. Inappropriate design of a service can greatly reduce the motivation of users to use the communal website.

The functionality can be increased by controlling web service statistics. Thanks to the specifics of IT technology, Internet media provide their owners with many opportunities to learn the behaviour of users. For example, it is possible to track which pages users of the service navigate more often, which information and forms they seek. It is no less important how much time they spend on each individual piece of content, as is checking their involvement and interaction (e.g., participation in surveys, forums, and chats). However, local government services rarely gather such data. Asked about the basic parameter, namely if the local government knows the number of users visiting their site⁴⁶, towns declared more interest in the website statistics. Five of seven towns with county rights among the respondents stated that they know the number of users. Whereas six in twenty urban communes gave positive answers. In the case of urban-rural and rural communes, these disparities become even deeper: only 41 replies in 177 declared the knowledge of such statistics.

Gathering the above data makes it possible to correct both errors in the design of the service and the conveyed content. For instance, geo-location of the web user’s computer (the region or state she comes from), knowledge of the number of unique users and visits to sub-pages may greatly improve the understanding of the recipients’ needs and indicate the content most relevant to them.

⁴⁶ The question included the following explanation: “If so, please state the number of unique users per month. If the website administrator does not have such data, please write 0/0”.

Conclusion

The implementation of WCAG 2.0 requirements is highly justified in the social conditions concerning not only persons with disabilities but also those digitally excluded. Insufficient level of IT-related competences is an important factor influencing the need to regulate the accessibility of websites for fit and healthy persons as well. Another important factor is the fact that the state had for many years neglected to provide appropriate legal regulations regarding the accessibility of content published online by public institutions, including local governments. The period of three years given to implement the standards may thus prove to be too short.

As the study shows, holders of local government on-line media, especially in urban-rural and rural communes, have no knowledge regarding the compliance of their Internet media with WCAG 2.0 standards. This, combined with the lack of usability tests or basic information about web service statistics enables drawing the conclusion that communes blatantly ignore the basic parameters which affect the reception of content they publish. The recipient of local government communication remains unknown to the website authors...

The diagnosis of legal conditions indicates one more important component, that is, the way in which the introduced regulations are enforced. If the controlling authorities verifying the implementation of WCAG 2.0 standards are going to use exclusively free online tools, the results of such automatic audits will be incomplete. Without the triangulation of data from, for instance, checking the usefulness of online statistics, the obtained data can be biased or even confusing.

The above statement allows drawing an important conclusion for the future that the implementation of WCAG 2.0 principles may have a side effect, impoverishing the content of local government websites for technical reasons. This threatens audio and video materials the most, e.g., coming from Internet television belonging to communes, as well as the digital issues of local government periodicals (published as PDF files). Appropriate preparation of such content (such as audio description or generating PDF files compliant with WCAG 2.0 guidelines) requires time, trained personnel, and appropriate tools. Local government officials will find it easier to publish a film on YouTube.com or a PDF file in a community portal (or another external service) than on its own website subjected to the exigencies of the regulation. It should be stressed that there are no legal conditions preventing such practices of communes. This conclusion may also serve as an inspiration to carry out subsequent research to verify such a hypothesis.

Problems with the standards of local government websites mark the beginning of building the communication between offices and citizens. The needs and habits of web users change quickly, following the dynamic IT development. The regulator of this environment, the state, reacts with much delay, and the legislators are unable to cope with predicting the changes or at least creating rules flexible enough so that they could be adapted to the constantly evolving media landscape associated with the development of the IT.