DIGITALIZATION OF PROCEDURES IN SPATIAL PLANNING AND CONSTRUCTION LAW IN CROATIA

Mateja Held, PhD, Associate Professor

Faculty of Law, University of Zagreb, Trg Republike Hrvatske 3, Zagreb, Croatia mateja.held@pravo.unizg.hr

ABSTRACT

Spatial planning and construction are interdisciplinary areas in which various factors interweave, such as sociological, cultural, economic, environmental, etc. In the process of spatial planning, green and digital transformation has an indispensable role. Spatial plans' developers should take into account protection of the environment, which is emphasized in the soft law mechanisms of the European Union (such as the European Green Deal) and the national spatial planning legislation. The aim of the paper is to present the EU legislation on the digitalization of spatial planning which reflects principles of the good administration as laid out in the Charter of the European Union on Fundamental Rights (effective, efficient and transparent public administration) and to research whether Croatia has suitable legislative framework for the digitalization in the area of spatial planning and construction. An additional goal is to research whether the legislative framework is functional and whether obstacles occur in practice.

The paper is therefore divided in five chapters. After the introduction, the paper presents EU legislation, namely the so-called INSPIRE directive which serves as a basic tool for the harmonization of EU Member State's policies regarding environmental questions and as a basis for the national spatial data infrastructures. The next chapter analyzes Croatian response to the INSPIRE directive after the accession of Croatia into the EU in 2013, till the recently adopted Digital Strategy of Croatia in 2023. After the insight into the context of the digitalization of Croatian public administration sector, research is focused on the Regulatory Framework of the Physical Planning Information System and on the reflection of the digitalization in procedures of the protection of the objective legality and subjective rights of the citizens. In those procedures, citizens are considered as collaborators who participate in the process of the spatial plan development. In the final part of the paper, recommendations are given for a better functioning of the digitalized procedures in the area of spatial planning and construction law in Croatia.

Keywords: Croatia, digitalization, European Union, , INSPIRE directive, planning information system, spatial plan.

1. INTRODUCTION

Among the key benefits of the recently adopted European Green Deal¹ are fresh air, clean water, healthy soil and biodiversity, as well as energy efficient buildings, all of which is associated with the activities of spatial planning, construction and digitalization.² European Green Deal, as a communication of the European Commission, is categorized as a soft law mechanism, or a non-binding instrument.³ European Commission announced it in 2019 with a common goal of reducing carbon emissions for at least 50% till 2030 and assessing of carbon neutrality till 2050.⁴ Measures of the European Green Deal⁵ are interrelated with the area of spatial planning⁶ and construction⁷ due to the interdisciplinary character of both areas.⁸ In the proce-

¹ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions the European Green Deal, COM/2019/640 final (hereinafter: European Green Deal).

² Smart technologies and digitalization are important nowadays across the Europe which puts emphasis on environmental protection and transformation from linear economy towards green or circular economy, See: Bertoncelj, A., *Digital Transformation in the Context of European Union's Green Deal*, Amfiteatru Economic, Vol. 24, No. 59, 2022, p. 5.

³ Duić mentions that soft law should be considered as an interspace between legal obligations and political attitudes, See: Duić, D., *Europska politika zaštite okoliša i Europski zeleni plan*, in: Duić, D.; Ćemalović, U. (eds.) Zakonodavstvo zaštite okoliša i održivi ekonomski razvoj u EU, Josip Juraj Strossmayer University of Osijek, Faculty of Law, Osijek, 2022, p. 15.

⁴ European Green Deal contains eight measures: increasing the EU's climate ambition for 2030 and 2050; supplying clean, affordable and secure energy; mobilizing industry for a clean and circular economy; building and renovating in an energy and resource efficient way; accelerating the shift to sustainable and smart mobility; from 'Farm to Fork': designing a fair, healthy and environmentally-friendly food system; preserving and restoring ecosystems and biodiversity; a zero-pollution ambition for a toxic-free environment.

⁵ Objectives set down by the European Green Deal will hardly be possible to achieve without integral approach and taking into account relevant factors for urban sustainable development such as challenges of green and digital transitions, specific demographic changes, impact of climate change, etc., European Commission, *Sustainable urban development*, [https://ec.europa.eu/regional_policy/policy/ themes/urban-development_en] Accessed 13 April 2023, More on sustainable development and its goals in regard to spatial planning See in: Metternicht, G., *Land Use and Spatial Planning, Enabling Sustainable Management of Land Resources*, Springer, Cham, Switzerland, 2018, pp. 53-54

⁶ Among the goals of physical planning in Croatia are reasonable usage and protection of the natural resources, protection of the nature, protection of the environment and the prevention of the risks of the pollution, See: Article 6/1/6 of the Physical Planning Act, Official Gazette, No. 153/13, 65/17, 114/18, 39/19, 98/19.

For example, measure 'building and renovating in an energy and resource efficient way' is directly connected to the construction, since "construction, use and renovation of buildings require significant amounts of energy and mineral resources (e.g. sand, gravel, cement). Buildings also account for 40% of energy consumed. Today the annual renovation rate of the building stock varies from 0.4 to 1.2% in the Member States. This rate will need at least to double to reach the EU's energy efficiency and climate objectives" (European Green Deal).

⁸ For example, Physical Planning Act in the Republic of Croatia defines spatial planning as a mechanism of management of utility of the space, but under the condition of preserving the quality of the envi-

dures of the development of spatial plans, spatial plan developers should act in accordance with the principle of legality and with an aim of preventing environmental pollution. In this respect, Ofak mentions "selecting locations for new installations, establishing changes which have occurred in existing installations and planning new infrastructure" as well as "the distance between an installation and residential areas, public places and environmentally significant areas".⁹

Regarding the fact that land and the environment are limited resources and regulation on the national level was set to different standards, EU was making efforts to harmonize public sectors of the Member States when it comes to the public sector information (hereinafter: PSI),¹⁰ with an aim of an efficient and effective public administration.¹¹ In all the mentioned processes, digitalization plays a key role towards efficient, effective and transparent public administration, as a tool for protecting the rights of the citizens in administrative procedures.

Besides the PSI, the EU developed common standards covering, among other issues, land use data in the Directive 2007/2/EC of the European Parliament and of the Council (hereinafter: INSPIRE directive). Paper focuses on Croatian response to the INSPIRE directive. After accessing into the EU, Croatian response to the INSPIRE directive was the adoption of the National Spatial Infrastructure Act in 2013,¹² and since then process of digitalization in Croatia was constantly evolving. Access to data has multiple positive effects, such as improved standards on efficiency, transparency, smart and good governance. The aim of this paper is to research and systematize guidelines and tools in Croatia available nowadays to all participants of spatial planning and construction in the administrative procedures, such as e-plans, e-permits, Physical planning information system, etc. The paper aims also to present certain obstacles in the functioning of available tools, and to give recommendations for the improvement of the application of those tools in the area of spatial planning and construction law in Croatia.

ronment, See: Art. 3/29 of the Physical Planning Act, Official Gazette, No. 153/13, 65/17, 114/18, 39/19, 98/19.

⁹ Ofak, L., *Croatia In International Encyclopaedia of Laws*, in: Deketelaere, K. (ed.), Alphen van den Rijn,Environmental Law, NL: Kluwer Law International, 2020, p. 116.

¹⁰ Directive 2003/98/EC on the re-use of public sector information as amended by Directive 2013/37/ EU (the 'PSI Directive'). On public sector information see more in: van Loenen, B.; Grothe, M., *INSPIRE Empowers Re-Use of Public Sector Information*, International Journal of Spatial Data Infrastructures Research, 2014, Vol. 9, pp. 86-106.

¹¹ PSI Directive was transposed to Croatia through Act on Right to Information, and General Administrative Procedure Act, [https://digital-strategy.ec.europa.eu/en/library/implementation-psi-directive-croatia], Accessed 10 April 2022.

¹² National Spatial Data Infrastructure Act, Official Gazette, No. 56/13, 52/18, 50/20 (hereinafter NSDI Act).

2. THE INSPIRE DIRECTIVE

Preparation of the INSPIRE directive with the engagement of all important participants took several years.¹³ European Commission launched the INSPIRE Initiative in 2001,¹⁴ and the INSPIRE directive was adopted in 2007 after the agreement between the Council and European Parliament in 2006, with an aim of the establishment of the Infrastructure for Spatial Information¹⁵ in the European Community.¹⁶ In art. 3 of the INSPIRE certain basic terms are defined such as infrastructure for spatial information, spatial data, spatial data set, spatial data services, spatial object, metadata, interoperability, Inspire geo-portal, public authority and third party. Chapter II refers to metadata, and chapter III to the interoperability of spatial data sets and services. After the adoption of the INSPIRE Directive, European Union adopted a set of regulation for a better implementation of the INSPIRE Directive.¹⁷

The first goal of the INSPIRE directive is the protection of the environment and serves as a tool for harmonization of EU Member States' policies regarding environmental questions, but its goal is also usable for all government policies.¹⁸ INSPIRE directive also enables a re-use of geospatial information¹⁹ across the Europe.²⁰

¹³ More on the process of the preparation of the INSPIRE directive see in: Craglia, M.; Annoni, A., *INSPIRE: An Inovative Approach to the Development of Spatial Data Infrastructures in Europe*. in: Onsrud, H. (ed.) Research and Theory in Advancing Spatial Data Infrastructure Concepts. ESRI Press, Redlands, California, USA, 2007, pp. 96-106.

¹⁴ Annoni, A.; Craglia, M., *Towards a Directive Establishing an Infrastructure for Spatial Information in Europe (INSPIRE)*, From Pharaohs to Geoinformatics FIG Working Week 2005 and GSDI-8 Cairo, Egypt April 16-21, 2005, p. 2, [https://fig.net/resources/proceedings/fig_proceedings/cairo/papers/ts_47/ts47_01_annoni_graglia.pdf], Accessed 10 April 2023.

¹⁵ Authors, when referring to the INSPIRE project or INSPIRE directive talk about "the largest harmonization tool ever undertaken in Europe" with the main focus on the "sharing and re-use of spatial data and services in support of European environmental policies and policies that affect the environment.", See: Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *New Directions in Digital Government Using INSPIRE*, International Journal of Spatial Data Infrastructures Research, 2018, Vol. 13, p. 203.

¹⁶ Art. 1 of the INSPIRE directive.

¹⁷ Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) was published in the Official Journal on the 25th April 2007. The INSPIRE Directive entered into force on the 15th May 2007, [https://inspire.ec.europa.eu/id/document/tg/au], Accessed on 3 April 2023.

¹⁸ Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, p. 219.

¹⁹ Geospatial information has its use in multiple areas such as environment, education, traffic, transport, economic development, water management, etc., and its re-use is of importance to all governments on the territory of the Europe. For examples of using geospatial information see in: Avtar, R., *et al. Utilizing geospatial information to implement SDGs and monitor their Progress*, Environ Monit Assess 192, Vol. 35, 2020, pp. 1-21.

²⁰ Sjoukema, J-W. et. al., The Governance of INSPIRE: Evaluating and Exploring Governance Scenarios for the European Spatial Data Infrastructure, International Journal of Geo-information, MDPI, Vol. 11, No. 141, 2022, p. 2.

The INSPIRE directive is a basis for the national spatial data infrastructures²¹ which should become available not only to the specialists within the area of spatial planning, geodetic specialists, architects or lawyers, but instead, its goal is to create tools which are citizen-friendly or user-centric,²² meaning those tools should be available to every citizen interested in some sort of spatial information.²³ In that process certain obstacles emerge, such as technical difficulties or fragmentation of the sets of data which are not mutually harmonized in one country. Another obstacle comes from a lack of knowledge of the officials who should be entitled to work with the tools, as well as from the citizen themselves, since there are not very comfortable with a fact they have to share their private data on e-services.²⁴

Spatial data infrastructure promoted by the INSPIRE directive in 2007 can affect spatial planning process in two ways: on one hand it gives spatial planners sets of data necessary to create a new spatial plan which facilitates their work, and on the other hand it enables insight into the new spatial plan with a better quality of data to all participants who will later use it as a tool.²⁵ In 2008, only one year after implementation of the INSPIRE directive, EU adopted the INSPIRE Metadata Regulation²⁶ where rules were laid down concerning the metadata used to describe the spatial data sets and services from the annex I of the INSPIRE directive (spatial data themes referred to in articles 6(a), 8(1) and 9(a)), annex II of the INSPIRE directive (spatial data themes referred to in articles 6(a), 8(1) and 9(b)) and annex III of the INSPIRE directive.²⁷ Mentioned Metadata Regulation was followed by other decisions and regulations:²⁸

²¹ INSPIRE documentation for Croatia is available at: [https://www.nipp.hr/default.aspx?id=14] Accessed 10 April 2023.

²² User-centricity is one of four which are used to evaluate online public services (European Commission, *eGovernment 2022 Insight Report, Synchronizing Digital Governments*, Publications Office of the European Union, 2022, pp. 7-8.

²³ On criticism on the INSPIRE see for example in: Sjoukema, J-W. et. al., note 20, p. 2.

²⁴ Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., op. cit., note 15, pp. 205-206.

²⁵ Kaczmarek, I.; Iwaniak, A.; Łukowicz, J., *New spatial planning data access methods through the implementation of the INSPIRE Directive*, Real Estate Management and Valuation, Vol. 22, No. 1, p. 21.

²⁶ Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/ EC of the European Parliament and of the Council as regards metadata, OJ L 326, p. 12–30, (Special edition in Croatian: Chapter 13 Volume 058 P. 240 – 258).

²⁷ More on spatial data themes see in: Annoni, A.; Craglia, M., *op. cit.*, note 14, p. 4.

²⁸ Documentation available on: [https://inspire.ec.europa.eu/inspire-directive/2] Accessed 11 April 2023.

- In 2009: Commission Decision regarding INSPIRE monitoring and reporting,²⁹ Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services,,³⁰ Corrigendum to INSPIRE Metadata Regulation ;³¹
- In 2010: Regulation on INSPIRE Data and Service Sharing,³² Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets and services from,³³ Commission Regulation amending Regulation (EC) No 976/2009 as regards download services and transformation service,³⁴ Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services;³⁵
- In 2011: Commission Regulation (EU) No 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/ EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services ,³⁶
- In 2013: Commission Regulation (EU) No 1253/2013 of 21 October 2013 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/ EC as regards interoperability of spatial data sets and services;³⁷

²⁹ According to Commission Decision 2009/442/EC of 5 June 2009 implementing the INSPIRE Directive, EU Member States have to report annually a number of indicators for monitoring the implementation and use of their infrastructures for spatial information. The information provided includes a list of spatial data sets and services belonging to those infrastructures, [https://inspire.ec.europa.eu/Monitoring-and-Reporting/Monitoring-and-Reporting/69], Accessed 10 April 2022.

³⁰ Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services OJ L 274, 20.10.2009, p. 9–18 (Special edition in Croatian: Chapter 13 Volume 044 P. 279 – 288).

³¹ Corrigendum to Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata OJ L 326, 4.12.2008.

³² Commission Regulation (EU) No 268/2010 of 29 March 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the access to spatial data sets and services of the Member States by Community institutions and bodies under harmonized conditions OJ L 83, 30.3.2010, p. 8–9 (Special edition in Croatian: Chapter 13 Volume 059 P. 146 – 147).

³³ Consolidated text: Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.

³⁴ Consolidated text: Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services.

³⁵ Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/ EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services OJ L 323, 08 December 2010.

³⁶ Commission Regulation (EU) No 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services, OJ L 31, 5.2.2011, p. 13–34, (Special edition in Croatian: Chapter 13 Volume 034 P. 198 – 219).

³⁷ Commission Regulation (EU) No 1253/2013 of 21 October 2013 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC as regards interoperability of spatial data sets and services.

In 2014: Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/ EC of the European Parliament and of the Council as regards interoperability of spatial data services ;³⁸ Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element ,³⁹ Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services ⁴⁰ Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element .⁴¹

3. CROATIAN RESPONSE TO THE INSPIRE DIRECTIVE

3.1. Digital transformation process and the role of electronic administration

Digitalization process in Croatia⁴² is analyzed after providing broader context of the digitalization process in the Croatian Public Administration.⁴³ Digitalization of the processes in land administration, spatial planning and construction law can be considered as just one aspect of the digitalization of public administration in

³⁸ Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services, OJ L 354, 11.12.2014, p. 8–16.

³⁹ Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element OJ L 354, 11.12.2014, p. 6–7.

⁴⁰ Commission Regulation (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services, OJ L 354, 11.12.2014, p. 8–16.

⁴¹ Commission Regulation (EU) No 1311/2014 of 10 December 2014 amending Regulation (EC) No 976/2009 as regards the definition of an INSPIRE metadata element OJ L 354, 11.12.2014, p. 6–7.

⁴² Central State Office for Digital Society Development is a "state administrative organisation with the task of monitoring and improving the development of the digital society and complying with European Union guidelines and regulations in the field of digital society and economics" [https://rdd.gov.hr/o-sredisnjem-drzavnom-uredu/9?lang=en] Accessed 11 April 2023; COVID-19 was catalyst in the digitalization process in Croatia, for example, "in Croatia, the number of e-service transactions rose from approximately 25% of cases pre-pandemic, to 85% during the pandemic" (FAO, UNECE and FIG *Digital transformation and land administration* – Sustainable practices from the UNECE region and beyond. FIG Publication No. 80. Rome. 88, 2022, p. 12, (hereinafter: FAO, UNECE and FIG (2022)). For the Croatian perspective see: Held, M.; Perkov, K., *Spatial Planning in the EU and Croatia under the Influence of COVID-19 Pandemic*, EU And Comparative Law Issues and Challenges Series (ECLIC) – Vol. 6, 2022, pp. 591–624.

⁴³ Governments should aim towards digital governments, otherwise, they won't be able to provide their services efficiently with necessary level of quality, See: Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, p. 206.

general which has its roots in the electronic administration or e-administration. E-administration⁴⁴ aims towards fast, efficient and effective service towards citizens.⁴⁵ Concept of e-administration was recognized and also supported by international organizations.⁴⁶ At the EU level, e-administration is accentuated by the two agendas. First was Digital Agenda for Europe which in 2010 (2010-2020) emphasized role of ICT in public administration with specific provisions added in 2015.⁴⁷ Second Digital Agenda (2020-2030)⁴⁸ focused on "three key objectives in digital: technology that works for people, a fair and competitive economy and an open, democratic and sustainable society".⁴⁹

E-administration sets focus on citizens which achieve their rights in administrative procedures before public bodies. Important benefits from e-administration are simplification and speeding up procedures before public bodies.⁵⁰ In Croatia, process of modernization of the administrative procedural law started with the Government document titled Starting points and principles for the modernization of the general administrative procedure in Croatia adopted in 2006.⁵¹ Basic act regulating administrative procedures is the General Administrative Procedure Act,⁵² which was adopted in 2009 and entered into the force in 2010.⁵³ In Article

Electronic administration indicates "ICT in public administration for increasing efficiency and effectiveness in providing public services and functioning of internal processes and increasing transparency and accountability of public administration from the other side" Musa, A.; Vrček, N.; Jurić, M., *Elektronička uprava kao perspektiva razvoja društva i privatnog sektora.* in: Koprić, I.; Musa, A.; Giljević T. (ed.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 527.

⁴⁵ *Ibid.*, p. 526.

⁴⁶ Musa, Vrček and Jurić mention World Bank, OECD, United Nations, Open Government Partnership, as well as European Union, *Ibid.*, pp. 530-532.

⁴⁷ Specific provisions were: providing better access for consumers and businesses to digital goods and services across Europe; creating the right conditions for digital networks and services to flourish; and maximizing the growth potential of the digital economy (https://www.europarl.europa.eu/factsheets/ en/sheet/64/digital-agenda-for-europe, Accessed on 4th April 2023).

⁴⁸ Second digital agenda was complemented by 10-year digital compass, See: European Parliament, *Digital Agenda for Europe* [https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe], Accessed on 4 April 2023.

⁴⁹ Ibid.

⁵⁰ Ciekanowski, Z.; Wyrębek, H., *The Importance of E-administration – Building Information Society*, Rocznik Bezpieczeństwa Morskiego Vol. XIV – 2020, p. 288.

⁵¹ Staničić, F.; Jurić, M., Pravni okvir za implementaciju informacijsko-komunikacijskih tehnologija u hrvatsko upravno postupovno pravo, Zbornik PFZ, Vol. 65, No. 5, 2015, p. 638. Mentioned document was followed by the strategic document Guidelines of the Government of the Republic of Croatia for adoption the new General Administrative Procedure Act (*Ibid.*).

⁵² General Administrative Procedure Act, Official Gazette, No. 47/09, 110/21 (hereinafter: GAPA).

⁵³ Public administration in Croatia at that time, as in the other transition countries, went through the reform phase. Results were new procedural acts regulating protection of rights of the citizens before

75 of the GAPA, electronic communication was enabled between public bodies and citizens, but Koprić mentions it was not regulated in a way which could enable its efficient use.⁵⁴ The latest version of the GAPA changed provisions regarding electronic communication towards a more efficient use.⁵⁵ After adoption of the GAPA, some other important acts regulating the area of the electronic communication entered into the force, such as Electronic Signature Act,⁵⁶ Electronic Communication Act⁵⁷ and State Information Infrastructure Act adopted in 2014⁵⁸ based on which the system of E-citizens⁵⁹ was enabled.⁶⁰

Nowadays there is a clear difference between e-government and digital government. Workshop on the implementation of the INSPIRE directive which took place in 2017, explains mentioned difference as follows: "e-government refers to a shift of public services from paper to online formats, while digital government involves a step change in the processes and sometimes the business model involved in providing digital public services."⁶¹ One of the aspect of the implementation of the INSPIRE into the national systems of the member states is the development of national strategies on the digitalization.⁶²

The latest document on digitalization of public administration in Croatia is the Strategy for Digital Croatia for the period till 2032⁶³ which is in connection with Digital Agenda for Europe.⁶⁴ Strategy defines vision of the digitalization of the so-

⁵⁵ GAPA, Official Gazette, No. 110/21.

- ⁵⁷ Electronic Communication Act, Official Gazette, No. 76/2022.
- ⁵⁸ State Information Infrastructure Act, OG 92/2014 (hereinafter: SIIA).
- ⁵⁹ E-Građani, [https://gov.hr/], Accessed 6 April 2023.
- ⁶⁰ Staničić, F.; Jurić, M., op. cit., note 51, p. 653; Đanić Čeko, A.; Guštin, M., Digitalizacija hrvatske javne uprave s posebnim osvrtom na sustav socijalne skrbi, Zbornik radova Pravnog fakulteta u Splitu, Vol. 59, No. 4, 2022, pp. 796, 804-808.
- ⁶¹ Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *op. cit.*, note 15, p. 205.
- ⁶² France, Denmark and Czech Republic have clear digital strategy (*Ibid.*, p. 205).
- ⁶³ Strategy for Digital Croatia for the Period 2032, Official Gazette, No. 2/2023, entered into the force on 1st April 2023 (hereinafter: the Strategy).
- ⁶⁴ See: Chapter 2.2 of the Strategy.

Mateja Held: DIGITALIZATION OF PROCEDURES IN SPATIAL PLANNING...

public administration and administrative courts due to influence of the EU and ECHR (Held, M., *The Development of the Administrative Court Systems in Transition Countries and Their Role in Democratic, Economic and Societal Transition*, Hrvatska komparativna i javna uprava-Croatian and Comparative Public Administration, Vol. 22, No. 2, 2022, p. 213.

⁵⁴ Koprić, I., Jedinstveno upravno mjesto (one-stop-shop) u europskom i hrvatskom javnom upravljanju. In: Koprić, I.; Musa, A.; Giljević, T. (eds.) Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 568. Procedure could have been initiated or canceled electronically (Art. 41 and 46 of GAPA). Articles 60, 71, 83, 84, 94, 159 regulate actions that could have been committed electronically.

⁵⁶ Electronic Signature Act, Official Gazette, No. 10/2002, 80/2008, 30/2014, 62/2017, which is no longer in force.

ciety, public administration and economy of the Republic of Croatia, strategical goals, their indicators of efficiency with an aim of realization of the proposed public policies.⁶⁵ Strategy is a part of the National Development Strategy of the Republic of Croatia 2030⁶⁶ and of Strategy's goal titled 'digital transition of society and economy' in development direction 'green and digital transition'.⁶⁷ Spatial Planning and Construction area is incorporated into the chapter 4.3 in the strategical goal 3 which should develop accessible and applied networks of extra-large capacities⁶⁸.

In the area of spatial planning and construction, administrative and regulative obstacles were noticed,⁶⁹ and following measures were adopted due to their resolving: measure M2 of the Strategy – development and harmonization of the application of the legal framework in the area of construction, and improving practices of spatial planning in connection with setting networking of the large capacities, as well as a reform measure building connectivity as a basis of digital transition of society and economy. Both areas are priority areas of implementation of public policies – enabling preconditions for spatial planning and faster building of networks.⁷⁰ Besides the mentioned activities, adjustment of Spatial Planning Act and Construction Act will be constantly under monitoring for ensuring that local spatial plans do not become an obstacle for building and construction of the communication of the networks of extra-large capacities. Strategy mentions Ministry of Spatial Planning, Construction and State Assets, Croatian Regulatory Agency and Ministry of Sea, Traffic and Infrastructure as entitled bodies for a such activities.

⁶⁷ Introduction into the Strategy.

⁶⁵ See: Introduction into the Strategy.

⁶⁶ National Development Strategy of the Republic of Croatia 2030, Official Gazette, no. 13/21.

⁶⁸ In Croatian: *razvoj* širokopojasnih *elektroničkih komunikacijskih mreža*.

⁶⁹ For example, Croatian Architects Chamber on its website has publicly available research from 2020 on the satisfaction of the architects with the e-permit. Results of the research show that architect are not satisfied with the e-permit system, and they listed almost forty problems, but also gave solutions for resolving them. For example, slow loading of documentation, problems with the registration into the system, too much unnecessary data and re-entering already entered dana, insufficient education of individual civil servants, no possibility of correction mistake by themselves, etc.) They suggest simplification of the whole procedure, faster loading of the documentation, education of all participants, etc., Anketno istraživanje, *Zadovoljstvo arhitekata sustavom E-dozvola* [https://www.arhitekti-hka.hr/files/file/pdf/2020/Zadovoljstvo%20arhitekata%20sustavom%20e-dozvola.pdf] Accessed 11 April 2023).

⁷⁰ In Croatian: 4.3.1.1 Prioritetno područje provedbe javnih politika 3.1: Osiguravanje preduvjeta za prostorno planiranje i bržu gradnju mreža.

3.2. National Spatial Data Infrastructure

3.2.1. Regulative framework on the domestic level

National Spatial Data Infrastructure (hereinafter: NSDI) was mention for the first time in the Act on State Survey and Real Estate Cadastre.⁷¹ One whole chapter was dedicated to the NSDI,⁷² but it only partially reflected the goals set down by the INSPIRE directive.⁷³

After the accession into the European Union in 2013, Croatia accepted the obligation to implement the INSPIRE directive. NSDI74 was regulated as: "a set of technologies, measures, standards, implementation rules, services, human resources and other factors enabling efficient integration, management and maintenance of the sharing of spatial data as defined by this Act for the purpose of satisfying needs on both the national and European levels, which will be an integral part of the European Spatial Data Infrastructure defined by the INSPIRE Directive." by the National Spatial Data Infrastructure Act adopted in 2013,75 which was amended twice since.⁷⁶ Besides the harmonization of the INSPIRE directive, Croatian NSDI has to be harmonized with international legislation as well (GSDI,⁷⁷ UN-GGIM⁷⁸).⁷⁹ Preparation for the implementation of the INSPIRE directive started even earlier, in 2009 with the NSDI and INSPIRE days, as well as with the workshops held in 2012 and 2013. "The EU-funded "INSPIRATION - Spatial Data Infrastructure in the Western Balkans" project (duration 2012 - 2013) provided relevant information about the implementation status of policy, institutional and legal NSDI-frameworks with the purpose to promote SDI and further coordinate the implementation in the region (including Croatia)."80

⁷¹ Act on State Survey and Real Estate Cadastre, Official Gazette, No. 16/2007.

⁷² Articles 84-94 of the Act on State Survey and Real Estate Cadastre.

⁷³ Gašparović, I., *Geospatial Information Managenment in Croatia (Report Croatia)*, 2019, retrieved from: [https://ggim.un.org/country-reports/documents/UN-GGIM_Report_Croatia.pdf] Accessed 5 April 2023, p. 3. (hereinafter: Report Croatia, 2019).

⁷⁴ Vision of the NSDI is: "Everybody can find, understand and use spatial data." (Report Croatia, 2019).

⁷⁵ National Spatial Data Infrastructure Act, Official Gazette, No. 56/2013 (hereinafter: NSDI Act).

⁷⁶ National Spatial data infrastructure act, Official Gazette, No. 52/2018, 50/2020.

⁷⁷ Global Spatial Data Infrastructure Association.

⁷⁸ United Nations Initiative on Global Geospatial Information Management.

⁷⁹ European Commission, Digital Public Administration Fachtsheet Croatia, 2022, p. 43, [https:// joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2022_Croatia_vFinal_0.pdf], Accessed 6 April 2023.

⁸⁰ Three annual INSPIRE country report, 2016, p. 13, [https://cdr.eionet.europa.eu/hr/eu/inspire/reporting/envvznxva/HR_Three_annual_INSPIRE_Country_Report_20160516_FINAL.doc/manage_document], Accessed 6 April 2023.

According to the Report, there are 35 topics covered in Croatia, and the INSPIRE directive has one less (34) which means that Croatia unfortunately has to have an additional topic regarding the mine suspected areas.⁸¹ The Government of the Republic of Croatia is working continuously in the digitalization of the spatial planning and construction area, and accordingly in 2017 it adopted the Strategy Decision on the adoption of the National Spatial Data Infrastructure Strategy 2020 and the Strategic Plan of the National Spatial Data Infrastructure for the period 2017-2020.82 In the mentioned Decision, the Government entitles State Geodetic Administration for the implementation of measures and activities from its competence in prescribed deadlines. Croatian State Geodetic Administration is also the NSDI contact point⁸³ for the implementation of the INSPIRE directive.⁸⁴ Those tasks are especially important for the local and regional government, since there are expected to be most numerous potential NSDI subjects.⁸⁵ Institutional framework regarding the NSDI contains three different bodies,⁸⁶ and it is presented in the report as well is in the article of the NSDI Act as NSDI Council, NSDI Board and NSDI Working groups.⁸⁷

⁸¹ Report Croatia, 2019, p. 3.

⁸² Strategy Decision on the adoption of the National Spatial Data Infrastructure Strategy 2020 and the Strategic Plan of the National Spatial Data Infrastructure for the period 2017-2020, Official Gazette, No. 96/17.

⁸³ Contact point of the other European Union member states are available at: Cetl, V. et. al., *Summary Report of the implementation of the INSPIRE directive in EU*, Publications Office of the European Union, Luxembourg, 2017, p. 7, and at:[https://inspire.ec.europa.eu/contact-points/57734], Accessed 10 April 2023.

⁸⁴ Reports on the monitoring of the implementation of the INSPIRE directive in Croatia are available at: [https://www.nipp.hr/default.aspx?id=13], Accessed 6 April 2023.

⁸⁵ Report Croatia, 2019, p. 3.

⁸⁶ For Croatian implementation of the INSPIRE further see: Massers, I.; Cropoets, V., Progreess on the INSPIRE Implementation, GeoInformatics. 2015, Vol. 18, No. 1, pp. 22-24, [https://www.proquest. com/scholarly-journals/progress-on-inspire-implementation/docview/1655132939/se-2], Accessed 6 April 2023.

⁸⁷ Article 26 of the NSDI Act.



Figure 1. NSDI coordination structure in Croatia as in Report Croatia, 2019 on NSDI, p. 4.

NSDI Council consists of the president of the Council and members elected by the Government. One representative is elected from the National contact point as well as the president of the Council. Other members are elected from different state administration areas, one representative form each one, including the state administration for the spatial planning and construction.⁸⁸ Basic activities of the NSDI Council are focused on proposals of strategies, operative programs and other acts important for the creation, maintenance and development of the NSDI to the Government of the Republic of Croatia, it further promotes the establishment, maintenance and development of sources of spatial data and metadata, brings criteria for the establishment, maintenance and sharing of spatial data sources for the purpose of interoperability, etc.⁸⁹

NSDI Board is a permanent body for the NSDI. It consists of the three representatives of the NSDI Council, three representatives of the National contact point and heads of the working groups appointed by the NSDI Council.⁹⁰ It serves as

- ⁸⁹ Article 27/5 of the NSDI Act.
- ⁹⁰ Article 28/2 of the NSDI Act.

⁸⁸ Other members are elected from the state administration for the environmental protection and nature, state administration for e-Croatia, state defense administration, state administration for traffic, traffic infrastructure and electronic communication, state administration for the agriculture and forestry, state administration for science and education, state administration for the protection of the cultural heritage, state economy administration, state administration for the state survey and real estate cadastre, state administration for the statistics, state administration for the meteorology and hydrology, state administration for the safety of the sailing navigation, public institution for hydrographic area, community of geodesy and geoinformatics, community for economy of informatic technology, expert association of engineers of geodesy (Art. 27/1 of the NSDI Act).

a coordination link between the NSDI working groups and the NSDI Council. According to the Report, at the operational level there are NSDI working groups established for the purpose of elaborating certain tasks and obligations within the scope of the NSDI implementation. "Members of the workgroups are civil servants, regional, local or public officials, scientists and representatives of professional associations and experts from the private sector. Currently there are three workgroups, each dealing with specialized tasks, Working group for NSDI technical standards, Working group for NSDI capacity building, and the Working group for NSDI spatial data."⁹¹

4. DIGITALIZATION IN SPATIAL PLANNING AND CONSTRUCTION LAW

Digitalization of the spatial planning and construction area is a far more complex process than it could seem at the first sight. Terms such as 'planning', 'space', 'area', are familiar enough, even to non-professionals. But experts dealing with the digitalization have to deal more intensely with the matter in order to make a transparent, actual, precise, etc. planning information system (hereinafter: PIS).⁹² Elgendy in his dissertation on planning information systems systematically presents some aspects of the spatial planning problems evolving during spatial planning process. He categorized them into the "interconnectivities in the spatial context, the problem-space and the solution-space and the time dimension in spatial plans are developed on three levels, as in most other member state countries:⁹⁴ state level, regional level and local level. Various participants are included into spatial planning making process, as well as various factors (political, sociological, economical, legal, etc.) which all together makes spatial planning process and its presentation in PIS very complex.

⁹¹ Report, p. 5.

⁹² Getimis, Reimer and Blotevogel emphasize coordination between multiple layers and different actors as one of the challenges of the spatial planning process (Getimis, P.; Reimer, M.; Blotevogel. H. H., *Conclusion – Multiple trends of continuity and change*, In: Getimis, P.; Reimer, M.; Blotevogel. H. H. (eds.) Spatial Planning Systems and Practices in Europe, A comparative perspective on continuity and changes, Routledge, New Your, Abingdon, 2014, pp. 281-282.

⁹³ Elgendy, H., Development and Implementation of Planning Information Systems in collaborative spatial planning processes, doctoral dissertation, Bauingenieur-, Geo- und Umweltwissenschaften der Universität Fridericiana from Karlsruhe, 2003, p. 28.

⁹⁴ See in table 2 *Levels of government relevant for spatial planning in 2016* in: Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe, (COMPASS), final report, 2018, p. 17, [https://www.espon.eu/sites/default/files/attachments/1.%20 COMPASS_Final_Report.pdf], Accessed 6 April 2023, p. 17.

PIS are expected to be precise, accurate, easily readable, etc. However, spatial plans consist of texts, maps, picture, signs, symbols, which all have to present certain object of the spatial plan, or the purpose of the precise area, or maybe possibility of the construction in the certain area. They have to include transport routes, public areas, forests, national parks, etc. Therefore, the key role in the digitalization of the spatial planning system plays 'planning information' in every spatial plan which could be defined as "any information needed, processed or produced during a planning process."95 Since spatial planning process (and spatial planning system as well) is characterized by the interdisciplinarity, "information processed or produced in spatial planning in a planning situation is from various professional backgrounds, e.g. legal, social, ecological, engineering, and political, etc. Consequently, it is in different forms, e.g. laws, regulations, norms, studies, statistics, surveys, questionnaires, interviews, plans, decisions, recommendations, announcements, etc."96 "The primary function of PIS is to facilitate an information platform that supports processing and production of different types of planning information during different information processes in different information domains."97 While developing PIS, experts should include facts that planning process are not static and that actors included into the spatial planning system have different interest, roles and responsibilities it mentioned process.⁹⁸

Central state administration for the spatial planning area in Croatia is the Ministry for Physical Planning, Construction and State Assets⁹⁹ which enables e-services to the citizens on spatial planning and construction. Namely, on the website of the ministry following e-services are mentioned: Geoportal, ISPU-locator, eReal Estate, eCatalogue with eRegistry of spatial plans, ePlans, ePermits, eInvestments, eSpatial inspection, eEngergetic certificate, ePlans editor, eConstruction (building) diary.¹⁰⁰

In Croatia, PIS is presented by The physical planning information system (PPIS or ISPU)¹⁰¹ as an application of the Ministry of Construction and Physical Planning that merges into one unit the Geoportal, Cadastre and spatial plans, enabling to

⁹⁵ Elgendy, H., *op. cit.*, note 93, p. 39.

⁹⁶ *Ibid.*, p. 44-45.

⁹⁷ *Ibid.*, p. 103.

⁹⁸ *Ibid.*, p. 103.

⁹⁹ *Ibid.*, p. 28.

¹⁰⁰ Vlada RH, *e-usluge*, [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/e-usluge/3757] Accessed 5 April 2023.

¹⁰¹ In Croatian: Informacijski sustav prostornog uređenja (ISPU).

every citizen a simple access to information on rules of space use, on developing plans and reports on public debates. $^{\rm 102}$

The aim of the Croatian PPIS is a transparent physical planning system which is in accordance with the EU Charter of the Fundamental Rights.¹⁰³ Incorporating the right to a good governance into the provisions of the EU law, a standard is set for the procedures of the administrative bodies in the area of administrative law of member states of the EU, and not just for the EU institutions. Also, good governance is "a multi-layer concept which at the same time consists of the procedural guarantees aiming at the protection of the party in the procedure, procedural guarantees which cover more than an individual case and are aimed at protecting the public interest and the objective legal order, all the way to non-legal standards of procedures aiming at the optimal functioning of public administration and ensuring the quality of administrative procedures and efficiency".¹⁰⁴

4.1. Regulatory Framework of the PPIS in Croatia

In the chapter 3 of the Spatial Planning Act, PPIS is regulated as 'an interoperable and multi-platform system where all informational systems of public bodies included into the development or maintenance of the spatial data and other data of importance for the physical planning'.¹⁰⁵ Detailed structure, content, mode of operation, form and electronic standard of the information system, duties and obligations in the management and management of the information system of the Ministry, institutes, administrative bodies and professional administrative bodies in connection with the information system are prescribed by the Government in the Decree on the Information System.¹⁰⁶According to the Decree, moduls of the PPIS include: ePlans, eCatalouge, ePermit, eInspection, eArchive, eReal Estate, PPIS locator and entrance modul of the NSDI which were developed outside of the PPIS system, but with influence of the PPIS system.¹⁰⁷ It is important also that data available on the PPIS can be downloaded without a charge.¹⁰⁸ PPIS is a

¹⁰² The goal of the project "PPIS and its moduls" is to increasingly upgrade the level of usage of the ICT technologies in communication on the relation citizens-craftsmen-public administration (https:// mpgi.gov.hr/UserDocsImages//dokumenti/eRAZVOJ//brosura-A5-ispu.pdf, accessed 11 April 2023).

¹⁰³ Article 41 of the Charter on the Fundamental Rights of the European Union, OJ C 326.

¹⁰⁴ Koprić, I., *Prilagodbe hrvatske javne uprave europskim standardima*, Godišnjak Akademije pravnih znanosti, 2014., p. 16.

¹⁰⁵ Article 37/1 of the Physical Planning Act.

¹⁰⁶ Decree on the Physical Planning Information System, Official Gazette, No. 115/2015 (hereinafter: PPIS Decree).

¹⁰⁷ Article 5 of the PPIS Decree.

¹⁰⁸ Article 8/2 of the PPIS Decree.

basis for other procedures connected to spatial plan activities, which roughly can be divided on the protection of the objective legality and the protection of the subjective rights of the citizens.

4.2 Digitalization and the protection of the objective legality

Protection of the objective legality can be observed from two standpoints – during the procedure of the adoption of spatial plans and during the assessment of the legality of spatial plans. Both is enabled with the PPIS in Croatia. Basic principles of the Physical Planning Act regarding the adoption procedure of spatial plans are the following: integral approach in spatial planning,¹⁰⁹ horizontal integration in the space protection,¹¹⁰ vertical integration,¹¹¹ public and free access to data and documentation¹¹² of importance for physical planning.¹¹³ Of course, other principles such as the principle of realization and the protection of public and individual interest show a complexity of the mentioned procedures.¹¹⁴ Detail analysis of the procedure of the adoption of spatial plans goes beyond the purpose of this paper,¹¹⁵ but public discussion can be seen as a platform where all citizens of the respected area are included into the decision-making process.¹¹⁶ PPIS make easily accessible all relevant documentation necessary for the public discussion. Available tools and information on the digital platform make citizens relevant actors in

¹⁰⁹ Article 8 of the Physical Planning Act.

¹¹⁰ Article 12 of the Physical Planning Act.

¹¹¹ Article 13 of the Physical Planning Act.

¹¹² Article 14 of the Physical Planning Act.

¹¹³ Article 7 of the Physical Planning Act.

¹¹⁴ For example, the right to a private property is protected on the international and national level (Protocol 1 of the European Convention on Human Rights and Freedoms, Official Gazette, No. – IA 18/97, 6/99, 14/02, 13/03, 9/05, 1/06, 2/10, 13/17, and the article 48/1 of the Constitution of the Republic of Croatia, Official Gazette, No. 56/90, 135/97, 08/98, 113/00, 124/00, 28/01, 41/01, 55/01, 76/10, 85/10, 05/14, and the Property Act, Official Gazette, No. 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12, 152/14, 81/15, 94/17, but it can be limited under the conditions set by the law, in public interest, for which as an example may serve the institute of expropriation (Article 50/1 of the Constitution).

¹¹⁵ For the detail insight into the procedure of public participation in the spatial plan adoption process see in: Staničić, F., *Sudjelovanje javnosti i pristup pravosuđu u procesima prostornog planiranja*, Zbornik radova Veleučilišta u Šibeniku, 2017, No. 1-2, pp. 31-52.

¹¹⁶ Central portal for the counseling with the interested public s portal "*e-savjetovanja*". More about the portal "*e-savjetovavanja*" see in: Vidačak, I.; Đurman, P., *Savjetovanje s javnošću u donošenju propisa: kvaliteta javnog odlučivanja i sudjelovanje građana*, in: Koprić, I.; Musa, A.; Giljević, T., Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora, Institute for Public Administration, 2017, pp. 73-104.

the decision-making process. For that reason, they can be equal in the decision-making process with other stakeholders. $^{\rm 117}$

Second aspect of the PPIS in connection with the protection of the objective legality is the assessment of the legality of spatial plans¹¹⁸ for which regulatory framework is set in the chapter VI of the Administrative Disputes Act.¹¹⁹ The High Administrative Court is entitled to declare spatial plan as illegal if the procedure is conducted on the request of a party which received individual administrative act under the suspicion of violating party's rights. Essential condition for such a request is that individual act has its grounds in potentially illegal spatial plan.¹²⁰ However, Administrative Disputes Act allows in the article 83/2 initiation of the procedure by the notification of the citizens, the ombudsman or at the request of the court, in which case High Administrative Courts starts the assessment of the spatial plan ex officio.¹²¹ This regulation is of high importance for those citizens who will not be in the position to be considered as a party in the administrative procedure,¹²² and consequently, will not be able to receive individual administrative act according to the article 83/1 of the Administrative Disputes Act. The latest case law of the High Administrative Court shows us that the High Administrative Court starts procedures ex officio even if the initiative did not come from the indi-

¹¹⁷ Term 'citizen' and 'stakeholder' is not the same (Guidelines for Citizen Participation Processes, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/f765caf6-en, hereinafter: OECD), 2022, p. 13). While stakeholder refers to the "interested and/or affected party, including institutions and organizations, whether governmental or non-governmental, from civil society, academia, the media, or the private sector, 'citizens' are individuals, regardless of their age, gender, sexual orientation, religious, and political affiliations. The term is meant in the larger sense of 'an inhabitant of a particular place', which can be in reference to a village, town, city, region, state, or country depending on the context. In this larger sense, it is equivalent of people (OECD, 2022, p. 13).

¹¹⁸ Spatial plans on regional and local level are general acts (see Decision of the Constitutional Court U-II-5157/2005 from 5 March 2012). More on the legal nature of spatial plans see in: Omejec, J.; Banić, S., Diferencijacija propisa i općih akata u budućoj praksi Ustavnog suda i Upravnog suda u povodu Zakona o upravnim sporovima (2010.), Zbornik radova Pravnog fakulteta u Splitu, Vol. 49, No. 2, 2012., pp. 309-324.; Šikić, M.; Crnković, M., Upravnosudska i ustavnosudska kontrola zakonitosti akata jedinica lokalne i područne (regionalne) samouprave, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 37, No. 1, 2016, pp. 423-447.

¹¹⁹ Articles 83-88 of the Administrative Disputes Act, OG 20/10, 143/12, 152/14, 94/16, 29/17, 110/21.

¹²⁰ Article 83/1 of the Administrative Disputes Act.

¹²¹ In the mentioned case, High Administrative Court is not obliged to conduct the procedure of the assessment of the legality of spatial plan.

¹²² Party in the administrative procedure is a person who submitted the request before administrative body, a person against whom administrative proceedings are being conducted and a person who in order to protect his rights or legal interests, has the right to participate in the proceeding (Article 4 of the GAPA). Staničić mentiones that while 'the active and passive identification of a party is generally indisputable, there is an increasing amount of controversy surrounding the term 'legal interest'" (Staničić, F., *Abecedarij upravnog postupka*, Novi informator, no. 6572-6573 from 29 April 2019).

viduals, ombudsman or the court, but also if it came from a legal person.¹²³ Starting the procedure ex officio plays a great role in the protection of the objective legality because even in cases when individuals or legal persons were not parties in the administrative procedure, they can point out that a certain spatial plan is illegal. This is important especially in the inspection procedures in the construction area where a neighbor of the building which is under the inspection can only initiate the procedure, without being a party in such a procedure.¹²⁴ Construction inspection is conducting such a procedure ex officio.¹²⁵ The mentioned neighbor is excluded form submitting legal remedies in subsequent procedures or even precluded from his right to see the case file from the article 84/1 of the GAPA.

Digitalization of spatial plans and other relevant documentation is very useful in cases were individuals are not parties in the administrative procedures or procedures before the court. Citizens, entitled administrative bodies and administrative courts do not have to search for spatial plan in special issues of local official gazettes where spatial plan is published to start the procedure, since they have access through the portal PPIS in Croatia. This surely affects the efficiency of the mentioned procedures and leads towards a simplification of the protection of the objective legality.

4.3. Digitalization and the protection of the subjective rights of the citizens

Besides the fact that digitalization speeds up the proceedings of the adoption of the general acts through participation of the informed citizens, it also accelerates the issuance of the individual acts, and it enables participation of the citizens in the procedures affecting their rights. Pursuant to the Article 14 of the Physical Planning Act – principle of publicity and free access to data and documents of importance for spatial planning – the public has a right to participate in the procedures of the developing and the adoption of spatial plans. Digitalization also

¹²³ See case law of the High Administrative Court: Usoz-97/21-6 from 1 March 2022. Although mentioned case law is not directly connected with the assessment of the legality of spatial plans, it is important because it opens door for the direct requests for the questioning the legality of spatial plans. See also the decisions of the High Administrative Court of the Republic of Croatia: Usoz-75/21-9 from 31 March 2022, Usoz-19/22-9 from 26 September 2022, Usoz-21/22-7 from 26 September 2022, Usoz-81/22-8 from 26 September 2022, Usoz-159/20-5 from 29 November 2021, Usoz-61/21-5 from 25 October 2021, Usoz-37/20-11 of 11 June 2021. Mentioned attitude is confirmed also by the Constitutional court of the Republic of Croatia., see in: U-III/5917/2016 from 5 November 2019.

¹²⁴ Article 105 of the State Inspectorate Act, Official Gazette, No. 115/18, 117/21.

¹²⁵ Article 58 of the State Inspectorate Act.

implements principle of subsidiarity¹²⁶ guaranteed in the European Charter of Local Self-government.^{127,128} Citizens are involved in a form of their participation in decision making process.¹²⁹ Through the mentioned mechanism, public administration becomes more transparent, which may influence trust of the citizens in public administration and realization of other principles such as transparency, exchange of the information, and collaboration with the citizens.¹³⁰ Ministry of the Physical Planning, Construction and State Assets, through e-services, enables citizens to bring a request for issuance of the construction (building) permit¹³¹ through the e-permit system. GAPA regulates that this procedure can be initiated electronically (Article 41/1 of the GAPA). Delivery of the decision is also enabled electronically (article 83/1 and 83/3 of the GAPA).

Procedures before administrative bodies regarding the issuing of the mentioned acts are in its nature administrative procedures. Those procedures have to be transparent, efficient, and harmonized with all basic acts regulating those procedures,

¹²⁶ On subsidiarity principle see more in: Koprić, I., Upravljanje decentralizacijom kao nov pristup razvoju sustava .lokalne samouprave, Hrvatska javna uprava, Vol. 8, No. 1., p. 99.

¹²⁷ Article 4/3 of the European Charter of the Local Self-government, Official Gazette – IA No. 14/1997.

¹²⁸ Subsidiarity is together with proportionality, listed as one of the twelve interoperability principles of the *European Interoperability Framework* (EIF). More on the EIF see on: [https://joinup.ec.europa. eu/collection/nifo-national-interoperability-framework-observatory/european-interoperability-framework-detail], Accessed 6 April 2023.

Another relevant EIF principle regarding spatial data is openness which refers to the idea that data should be easily accessible to the citizens, unless some justified exceptions exist, such as personal data protection. Simplification of the administrative proceedings and effectiveness and efficiency are also set as principles of the EIF. Other EIF principles are: transparency, reusability, technological neutrality and dana portability, user-centricity, inclusion and accessibility, security and privacy, multilingualism and preservation of information (European Commission, *European Interoperability Framework – Promoting seamless services and data flows for European Public Administrations*, Publications Office of the European Union, Luxembourg, 2017, pp. 11-20, [https://ec.europa.eu/isa2/sites/isa/files/eif_brochure_final. pdf], Accessed 6 April 2023.

The result of the third EIF Monitoring Mechanism data collection exercise within the 27 Member States in 2021 indicated principle of subsidiarity and proportionality, subsidiarity and Proportionality; Inclusion and Accessibility; Multilingualism; and Assessment of Effectiveness and Efficiency as areas which need to be improved (European Commission, *Digital Public Administration Factsheet*, 2022, p. 6.). Report for Croatia shows that areas of improvement could be noticed in the Principles 5 (Technological neutrality and data portability) and 9 (Multilingualism). For the principle 7 (accessibility and inclusion, Croatia is above EU average (Digital Public Factsheet Administration Croatia 2022, p. 5).

¹²⁹ Article 14/3 of the Physical Planning Act.

¹³⁰ Musa, A., Informacije za građane: transparentnom i otvorenom javnom upravom prema boljem upravljanju i povjerenju građana, in: Koprić, I.; Musa, A.; Giljević T. (ed.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 54.

¹³¹ Other acts implementing the spatial planning documentation are regulated in the article 114/2 of the Physical Planning Act.

first and foremost with the GAPA, Spatial Planning Act, Construction Act,¹³² Construction Inspection Act,¹³³ as well as with all the relevant spatial plans documentation, namely local spatial plans and all the above mentioned plans on the hierarchical pyramid of spatial planning acts.¹³⁴

With the amendments of the Physical Planning Act and the Construction Act in 2019, the system for the issuing of construction permits became more efficient, faster and cheaper. The key amendment was the introduction of the system of eConference, through which necessary documentation can be submitted, collected and analyzed. Procedure itself has fewer steps, it is fully digitalized, less documentation is necessary and communication of all participants in the process is conducted electronically through the electronic notice board.¹³⁵

5. CONCLUSION

Digitalization nowadays embraces all activities and it is practically impossible to work in public sector without digitally available data sets. The transformation process from classic paper work form to digital tools covers all parts of public administration, and digitalization is used as an umbrella term for all of them.¹³⁶ The process of transformation began with the introduction of e-government, and more recently with the transition of e-government towards digital government focused on the user, meaning the citizen himself. Procedures in public administration became 'user-centric'. In other words, accessible spatial data made citizens collaborators, which are more involved in the decision-making process gives them an opportunity to participate on formal or informal public discussions, which is of high importance in the area of spatial planning and construction law.¹³⁷

Digitalization of spatial data and related digitalized procedures, such as issuing construction or building permits through the e-permits system, has positive effects emerging from the harmonization with the INSPIRE directive. Procedures of the protection of rights and freedoms of the citizens before administrative bod-

¹³² Construction Act, Official Gazette, No. 153/13, 20/17, 39/19, 125/19.

¹³³ Construction Inspection Act, Official Gazette, No. 153/13.

¹³⁴ Levels of spatial plans are set in the Physical Planning Act in articles 60-62.

¹³⁵ See at: [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/13752], Accessed 11 April 2023

¹³⁶ FAO, UNECE and FIG (2022), p. 5.

¹³⁷ Public discussion as a mandatory element in the process of the adoption of the spatial plan is regulated in the articles 94-106 of the Physical Planning Act in Croatia. For the detail insight into the procedure of public participation in the spatial plan adoption process see in: Staničić, F., *op. cit.*, note 15, pp. 31-52.

ies should reflect key elements of good governance guaranteed in the Charter of Fundamental Rights of the EU.

As a result of digitalization in Croatia, spatial plans are available through Physical planning information system, which is an application software of the Ministry of Physical Planning, Construction and State Assests that merges the Geoportal, Cadastre and spatial plans together, enabling every citizen simple access to spatial data. Further, application for the procedure of issuing necessary permits can be submitted through the e-permits portal, which contains a list of relevant services and competent authorities for those procedures, a list of architects who develop spatial plans and develop projects for building construction, a list of pertinent legislation, a list of verified spatial plans, rules for conducting spatial procedures, application forms and instructions, etc.

The general conclusion is that Croatian PPIS and its modules are generally in the accordance with the EU legislation on formal level, meaning that Croatia has adopted necessary acts for the implementation of the INSPIRE directive, has submitted necessary reports such as the 3-year term obligation for every member state of the EU, and has recently adopted Digital Strategy for the period till 2032.¹³⁸ However, certain obstacles appear on the functional level. Citizens are enabled to submit requests through the e-permit system. The system could be improved technically in order to allow a faster loading of documentation, otherwise such an obstacle can be especially aggravating for larger investors during the building process (architects warn that uploading the relevant documentation can take up to two or three days).¹³⁹ Another warning comes from architects regarding slow loading of documentation, problems with the registration into the system, too much unnecessary data and re-entering already entered data, insufficient education of individual civil servants, no possibility of correction of mistake by themselves.¹⁴⁰ As it was already mentioned, another obstacle in the functioning of the available tools is a lack of knowledge of the officials authorized to work with the tools, as well as from the citizen themselves, since there are not very comfortable with the

¹³⁸ "Croatia showed smooth transition into e-services" (FAO, UNECE and FIG (2022) as in Fučkar and Šimic Rukavina, 2021 *Land Registry Procedures in Time of the COVID-19 Pandemic in the Republic of Croatia.* In: Accelerated Digitalisation: The impact of the COVID-19 Pandemic on the Land Administration sector. UNECE Webinar. UNECE, 22 March 2021, [https://unece.org/info/events/ event/354013]

¹³⁹ [https://www.arhitekti-hka.hr/files/file/pdf/2020/Zadovoljstvo%20arhitekata%20sustavom%20 e-dozvola.pdf], Accessed 11 April 2023.

¹⁴⁰ *Ibid.*

fact they have to share their private data on e-services.¹⁴¹ PPIS system will most likely be upgraded, and other challenges may arise.

Certain suggestions for the implementation of the digitalization regarding the administrative procedures are permanent education of the administrative services with an aim of avoiding excessive formalism, and in order to keep up with changes in the PPIS of the Croatia which will strengthen public sector in its transparency, and consequently will result in the better level of citizens' confidence or trust into the digitalized public administration. With the appropriate supervision, permanent education along with the evaluation of the digitalization process, Croatia may have an easily available, transparent and user-centric PPIS which will serve as a tool, not just for the protection of the rights of the citizens, but also for the quality of public services in a domain of spatial planning and construction law which will be respectively elevated to a higher and satisfactory level.

REFERENCES

BOOKS AND ARTICLES

- Annoni, A.; Craglia, M., *Towards a Directive Establishing an Infrastructure for Spatial Information in Europe (INSPIRE)*, From Pharaohs to Geoinformatics FIG Working Week 2005 and GSDI-8 Cairo, Egypt April 16-21, 2005, [https://fig.net/resources/proceedings/ fig_proceedings/cairo/papers/ts_47/ts47_01_annoni_graglia.pdf]
- 2. Avtar, R. et al., Utilizing geospatial information to implement SDGs and monitor their Progress, Environ Monit Assess 192, 35 (2020)., pp. 1-21
- 3. Bertoncelj, A., *Digital Transformation in the Context of European Union's Green Deal*. Amfiteatru Economic, Vol. 24, No. 59, 2022, p. 5
- Borzacchiello, M. T.; Boguslawski, R.; Pignatelli, F., *New Directions in Digital Government Using INSPIRE*, International Journal of Spatial Data Infrastructures Research, 2018, Vol. 13, pp. 202-222 [https://core.ac.uk/download/pdf/229314298.pdf]
- 5. Cetl, V., *et. al., Summary Report of the implementation of the INSPIRE directive in* EU, Publications Office of the European Union, Luxembourg, 2017, p. 7
- 6. Ciekanowski, Z.; Wyrębek, H., *The Importance of E-administration Building Information Society*, Rocznik Bezpieczeństwa Morskiego Vol. XIV 2020, pp. 287-303
- Craglia, M.; Annoni, A., *INSPIRE: An Inovative Approach to the Development of Spatial Data Infrastructures in Europe*, in: Onsrud, H. (ed.) Research and Theory in Advancing Spatial Data Infrastructure Concepts. ESRI Press, Redlands, California, USA, 2007, pp. 96-106
- 8. Đanić Čeko, A.; Guštin, M., *Digitalizacija hrvatske javne uprave s posebnim osvrtom na sustav socijalne skrbi*, Zbornik radova Pravnog fakulteta u Splitu, Vol. 59, No. 4, 2022, pp. 793-821

¹⁴¹ Borzacchiello, M.T.; Boguslawski, R.; Pignatelli, F., op. cit., note 15, pp. 205-206.

- Duić, D., *Europska politika zaštite okoliša i Europski zeleni plan*, in: Duić, D.; Ćemalović, U. (eds.) Zakonodavstvo zaštite okoliša i održivi ekonomski razvoj u EU, Josip Juraj Strossmayer University in Osijek, Faculty of Law, Osijek, 2022
- Elgendy, H., Development and Implementation of Planning Information Systems in collaborative spatial planning processes, doctoral dissertation, Bauingenieur-, Geo- und Umweltwissenschaften der Universität Fridericiana from Karlsruhe, 2003
- Getimis, P.; Reimer, M.; Blotevogel. H. H., *Conclusion Multiple trends of continuity and change*, In: Getimis, P. Reimer, M., Blotevogel. H. H. (eds.) Spatial Planning Systems and Practices in Europe, A comparative perspective on continuity and changes, Routledge, New Your, Abingdon, 2014, pp. 278-305
- Held, M., The Development of the Administrative Court Systems in Transition Countries and Their Role in Democratic, Economic and Societal Transition, Hrvatska komparativna i javna uprava-Croatian and Comparative Public Administration, Vol. 22, No. 2, 2022, pp. 209-236
- Held, M.; Perkov, K., Spatial Planning in the EU and Croatia under the Influence of CO-VID-19 Pandemic, EU And Comparative Law Issues and Challenges Series (ECLIC) – Issue 6, 2022, pp. 591–624
- Kaczmarek, I.; Iwaniak, A.; Łukowicz, J., New spatial planning data access methods through the implementation of the INSPIRE Directive, Real Estate Management and Valuation, Vol. 22, No. 1, pp. 12-24
- Koprić, I. Jedinstveno upravno mjesto (one-stop-shop) u europskom i hrvatskom javnom upravljanju, in: Koprić, I.; Musa, A.; Giljević, T. (eds.) Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, p. 561-574
- Koprić, I., Prilagodbe hrvatske javne uprave europskim standardima, Godišnjak Akademije pravnih znanosti, 2014, pp. 8-39
- 17. Koprić, I., *Upravljanje decentralizacijom kao nov pristup razvoju sustava .lokalne samouprave*, Hrvatska javna uprava, Vol. 8, No. 1., pp. 95-133
- Massers, I.; Cropoets, V., Progreess on the INSPIRE Implementation, GeoInformatics. 2015, Vol. 18, No. 1, pp. 22-24 [https://www.proquest.com/scholarly-journals/progress-on-inspire-implementation/docview/1655132939/se-2]
- 19. Metternicht, G., *Land Use and Spatial Planning, Enabling Sustainable Management of Land Resources*, Springer, Cham, Switzerland, 2018
- Musa, A., Informacije za građane: transparentnom i otvorenom javnom upravom prema boljem upravljanju i povjerenju građana, in: Koprić, I.; Musa, A.; Giljević T. (eds.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, pp. 29-72
- Musa, A., Vrček, N., Jurić, M., *Elektronička uprava kao perspektiva razvoja društva i privatnog sektora*, in: Koprić, I.; Musa, A.; Giljević T. (eds.), Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora. Institute for Public Administration, 2017, pp. 525-560
- 22. Ofak, L., *Croatia In International Encyclopaedia of Laws*, in: Deketelaere, K. (ed.), Alphen van den Rijn,Environmental Law, NL: Kluwer Law International, 2020, p. 116

- 23. Omejec, J.; Banić, S., Diferencijacija propisa i općih akata u budućoj praksi Ustavnog suda i Upravnog suda u povodu Zakona o upravnim sporovima (2010.), Zbornik radova Pravnog fakulteta u Splitu, Vol. 49, No. 2, 2012., pp. 309-324
- Šikić, M.; Crnković, M., Upravnosudska i ustavnosudska kontrola zakonitosti akata jedinica lokalne i područne (regionalne) samouprave, Zbornik Pravnog fakulteta Sveučilišta u Rijeci, Vol. 37, No. 1, 2016, pp. 423-447
- 25. Sjoukema, J-W. et. al., The Governance of INSPIRE: Evaluating and Exploring Governance Scenarios for the European Spatial Data Infrastructure, International Journal of Geo-information, MDPI, Vol. 11, No. 141, 2022, pp. 1-17
- 26. Staničić, F., *Abecedarij upravnog postupka*, Novi informator, no. 6572-6573 from 29 April 2019
- 27. Staničić, F., *Sudjelovanje javnosti i pristup pravosuđu u procesima prostornog planiranja*, Zbornik radova Veleučilišta u Šibeniku, 2017, No. 1-2, pp. 31-52
- Staničić, F.; Jurić, M., Pravni okvir za implementaciju informacijsko-komunikacijskih tehnologija u hrvatsko upravno postupovno pravo, Zbornik Pravnog fakulteta u Zagrebu, 2015, Vol. 65, No. 5, pp. 635-663
- 29. van Loenen, B.; Grothe, M., *INSPIRE Empowers Re-Use of Public Sector Information*, International Journal of Spatial Data Infrastructures Research, 2014, Vol. 9, pp. 86-106
- 30. Vidačak, I.; Đurman, P., *Savjetovanje s javnošću u donošenju propisa: kvaliteta javnog odlučivanja i sudjelovanje građana*, in: Koprić, I.; Musa, A.; Giljević, T., Građani, javna uprava i lokalna samouprava: povjerenje, suradnja, potpora, Institute for Public Administration, 2017, pp. 73-104.

EU LAW

- 1. Charter on the Fundamental Rights of the European Union, [2012] OJ C 326
- Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata [2008] OJ L 326, Special edition in Croatian: Chapter 13 Volume 058 P. 240 – 258
- 3. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions the European Green Deal, COM/2019/640 final
- Directive 2003/98/EC on the re-use of public sector information as amended by Directive 2013/37/EU (the 'PSI Directive') [2013] OJ L 175
- Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (IN-SPIRE) [2007] OJ L 108

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

- 1. Act on State Survey and Real Estate Cadastre, Official Gazette, No. 16/2007
- 2. Administrative Disputes Act, Official Gazette, No. 20/10, 143/12, 152/14, 94/16, 29/17, 110/21

Mateja Held: DIGITALIZATION OF PROCEDURES IN SPATIAL PLANNING ...

- 3. Constitution of the Repbulic of Croatia, Official Gazette, No. 56/90, 135/97, 08/98, 113/00, 124/00, 28/01, 41/01, 55/01, 76/10, 85/10, 05/14
- 4. Construction Act, Official Gazette, No. 153/13, 20/17, 39/19, 125/19
- 5. Construction Inspection Act, Official Gazette, No. 153/13
- 6. Decision of the Constitutional Court U-II-5157/2005 from 5 March 2012
- 7. Decision of the Constitutional Court U-III/5917/2016 from 5 November 2019
- 8. Decree on the Physical Planning Information System, Official Gazette, No. 115/2015
- 9. Electronic Communication Act, Official Gazette, No. 76/2022
- 10. Electronic Signature Act, Official Gazette, No. 10/2002, 80/2008, 30/2014, 62/2017
- 11. European Charter of the Local Self-government, Official Gazette IA No. 14/1997
- 12. European Convention on Human Rights and Freedoms, Official Gazette, No. IA 18/97, 6/99, 14/02, 13/03, 9/05, 1/06, 2/10, 13/17
- 13. General Administrative Procedure Act, Official Gazette, no. 47/09, 110/21
- Judgement of the High Administrative Court of the Republic of Croatia Usoz-75/21-9 from 31 March 2022
- 15. Judgement of the High Administrative Court of the Republic of Croatia Usoz-19/22-9 of 26 September 2022
- Judgement of the High Administrative Court of the Republic of Croatia Usoz-21/22-7 from 26 September 2022
- 17. Judgement of the High Administrative Court of the Republic of Croatia Usoz-81/22-8 from 26 September 2022
- Judgement of the High Administrative Court of the Republic of Croatia Usoz-159/20-5 from 29 November 2021
- 19. Judgement of the High Administrative Court of the Republic of Croatia Usoz-125/20-5 from 29 November 2021
- 20. Judgement of the High Administrative Court of the Republic of Croatia Usoz-61/21-5 from 25 October 2021
- 21. Judgement of the High Administrative Court of the Republic of Croatia Usoz-37/20-11 of 11 June 2021
- 22. National Development Strategy of the Republic of Croatia 2030, Official Gazette, No. 13/21
- 23. National Spatial Data Infrastructure Act, Official Gazette, No. 56/13, 52/18, 50/20
- 24. Physical Planning Act, Official Gazette, No. 153/13, 65/17, 114/18, 39/19, 98/19
- 25. Property Act, Official Gazette, No. 91/96, 68/98, 137/99, 22/00, 73/00, 129/00, 114/01, 79/06, 141/06, 146/08, 38/09, 153/09, 143/12, 152/14, 81/15, 94/17
- 26. State Information Infrastructure Act, Official Gazette, No 92/2014
- 27. State Inspectorate Act, Official Gazette, No. 115/18, 117/21
- Strategy Decision on the adoption of the National Spatial Data Infrastructure Strategy 2020 and the Strategic Plan of the National Spatial Data Infrastructure for the period 2017-2020, Official Gazette, No. 96/17
- 29. Strategy for Digital Croatia for the Period 2032, Official Gazette, No. 2/2023

REPORTS AND GUIDELINES

- Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe, (COMPASS), final report, 2018, 17, [https://www.espon.eu/sites/default/files/attachments/1.%20 COMPASS_Final_Report.pdf], Accessed 6 April 2023
- European Commission, *Digital Public Administration Fachtsheet*, Croatia, 2022, p. 43, [https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2022_Croatia_ vFinal_0.pdf] Accessed 6 April, 2023
- 3. European Commission, eGovernment 2022 Insight Report, Synchronizing Digital Governments, Publications Office of the European Union, 2022, pp. 1-38
- European Commission, European Interoperability Framework Promoting seamless services and data flows for European Public Administrations, Publications Office of the European Union, Luxembourg, 2017, [https://ec.europa.eu/isa2/sites/isa/files/eif_brochure_final. pdf] Accessed 6 April 2023
- 5. FAO, UNECE and FIG *Digital transformation and land administration* Sustainable practices from the UNECE region and beyond. FIG Publication No. 80. Rome. 88, 2022,
- Gašparović, I., Geospatial Information Managenment in Croatia (Report Croatia), 2019, retrieved from: [https://ggim.un.org/country-reports/documents/UN-GGIM_Report_Croatia.pdf] Accessed 5 April 2023.
- 7. Guidelines for Citizen Participation Processes, OECD Public Governance Reviews, OECD Publishing, Paris
- Three annual INSPIRE country report, 2016, p. 13, [https://cdr.eionet.europa.eu/hr/eu/inspire/reporting/envvznxva/HR_Three_annual_INSPIRE_Country_Report_20160516_FI-NAL.doc/manage_document] Accessed 6 April 2023

WEBSITE REFERENCES

- Anketno istraživanje, Zadovoljstvo arhitekata sustavom E-dozvola [https://www.arhitekti-hka. hr/files/file/pdf/2020/Zadovoljstvo%20arhitekata%20sustavom%20e-dozvola.pdf] Accessed 11 April 2023
- 2. Cetl, V. et. al., Summary Report of the implementation of the INSPIRE directive in EU, Publications Office of the European Union, Luxembourg, 2017, p. 7, [https://inspire.ec.europa.eu/contact-points/57734] Accessed 10 April 2023
- 3. Državna geodetsk uprava, Dokumenti NIPP-a [https://www.nipp.hr/default.aspx?id=13] Accessed 6 April 2023.
- 4. E-Građani, [https://gov.hr/] Accessed 6 April 2023
- 5. E-usluge, [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/e-usluge/3757] Accessed on 5th April 2023
- 6. FairShare [https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe]Accessed on 4th April 2023.
- 7. INSPIRE documentation for Croatia is available at: [https://www.nipp.hr/default. aspx?id=14] Accessed 10 April 2023.

- 8. Metadata Regulation [https://inspire.ec.europa.eu/inspire-directive/2] Accessed 11 April 2023
- 9. PSI Directive was transposed to Croatia through Act on Right to Information, and General Administrative Procedure Act, [https://digital-strategy.ec.europa.eu/en/library/implementa-tion-psi-directive-croatia] Accessed 10 April 2022
- Subsidiarity is together with proportionality, listed as one of the twelve interoperability principles of the European Interoperability Framework (EIF), [https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/european-interoperabilityframework-detail] Accessed 6 April 2023
- 11. Vlada RH, [https://mpgi.gov.hr/eu-sufinanciranja/ispu-i-razvoj-e-usluga/13752] Accessed 11 April 2023
- 12. Vlada RH, [https://mpgi.gov.hr/UserDocsImages//dokumenti/eRAZVOJ//brosura-A5-ispu.pdf] Accessed 11 April 2023