

Introduction to Legal Building Information Modelling in Italy and Albania: A Comparative Approach

Introduzione al Building Information Modelling giuridico in Italia e in Albania: un approccio comparato

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Abstract*

Building information modelling (BIM) has revolutionized the working method. The scientific literature has been based on the implementation of BIM in civil engineering. However, in the recent years, the doctrine has been investigating the legal effects of introduction of BIM in the legal system. Indeed, Article 22(4) Directive 2014/24/EU, stimulated the application of building information electronic modelling tools, which also includes BIM. On the national level, while Italy has introduced a mandatory system of BIM for all public tenders over 2 million euro, Albania has not established legal norms for BIM. Considering EU integration and the fact that Albania has opened all the chapters of the EU integration, this paper considers the implementation of legal BIM in the Albanian legal system by taking into consideration the Italia model. In the conclusions, this scientific research suggests the application of the Italian model in the Albanian legal system.



Abstract*

Il Building Information Modelling (BIM) ha rivoluzionato le modalità di lavoro. La letteratura scientifica si è finora concentrata sull'implementazione del BIM nell'ingegneria civile. Tuttavia, negli ultimi anni, la dottrina ha iniziato ad approfondire gli effetti giuridici dell'introduzione del BIM nell'ordinamento giuridico. Infatti, l'articolo 22, paragrafo 4, della Direttiva 2014/24/UE ha incentivato l'applicazione di strumenti di modellazione elettronica delle informazioni edilizie, tra cui rientra anche il BIM. A livello nazionale, mentre l'Italia ha introdotto un sistema obbligatorio di BIM per tutti gli appalti pubblici superiori a 2 milioni di euro, l'Albania non ha stabilito norme giuridiche per il BIM. Considerando l'integrazione nell'UE e il fatto che l'Albania ha aperto tutti i capitoli dell'integrazione nell'UE, questo documento esamina l'implementazione del BIM giuridico nel sistema giuridico albanese prendendo in considerazione il modello italiano. Nelle conclusioni, questa ricerca scientifica suggerisce l'applicazione del modello italiano nel sistema giuridico albanese.

Keywords: Albanian public law; Albanian Law of Public Tenders; BIM; EU integration; Italy Code of Public Contracts

Summary: [1. Introduction.](#) – [2. From BIM to Legal BIM: A Comparative Approach.](#) – [3. Legal BIM: From EU law to national legislations in Italy and in Albania.](#) – [4. Conclusions.](#)

1. Introduction.*^a

Law and technology have shaped each other, also in the case of public tenders in the construction sector.¹ Applying new technologies in public procurements is an essential instrument of Public Administration since it increases efficiency and efficacy² as well as transparency.³

Public procurements are an important economic factor at international, European, and national levels. At the international level, public procurement represents approximately 15-20% of global GDP, with commitments under the GPA alone amounting to an estimated EUR 1.3 trillion in business opportunities

* The author of the abstract is N. Llagami.

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¹ J Mason, 'Intelligent Contracts and the Construction Industry' (2017) 9(3) Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 04517012.

² A Yakovlev and others, 'The Impacts of Different Regulatory Regimes on the Effectiveness of Public Procurement' (2015) 38(11) International Journal of Public Administration 796–814; I Rizzo, 'Efficiency and Integrity Issues in Public Procurement Performance' (2013) 31(1–3) Journal of Public Finance and Public Choice 111–128; M Milosavljević, N Milanović and S Benković, 'Politics, Policies and Public Procurement Efficiency: A Quantitative Study of 25 European Countries' (2016) 14(3) Lex Localis – Journal of Local Self-Government.

³ J Hochstetter and others, 'Transparency and E-Government in Electronic Public Procurement as Sustainable Development' (2023) 15(5) Sustainability 4672; TK Mackey and RE Cuomo, 'An Interdisciplinary Review of Digital Technologies to Facilitate Anti-Corruption, Transparency and Accountability in Medicines Procurement' (2020) 13(suppl 1) Global Health Action, 1695241.

worldwide.⁴ They are so crucial on the EU level that every year, the EU spends around 14% of GDP,⁵ which means that over 250,000 public authorities are published on the official website at the EU level.⁶ The same can also be stated at the Italian and Albanian national levels. For instance, in the second quarter of 2023, there was a boom in tenders in Italy.⁷ In Albania, construction is one of the main sectors for the national economy.⁸

At the EU level Article 22(4) of Directive 2014/24/EU facilitates the use of instruments such as Building Information Modelling (BIM) in procurement procedures. While Italy has implemented Article 22(4) of Directive 2014/24/EU, Albania has not introduced legal BIM for public tenders. Considering that during 2025, Albania opened all the chapters for the EU accession, this paper focuses on the introduction of BIM in the Albanian public law by considering the Italian model.

Although Albania is not part of the EU, Albanian judges have applied EU law, both at the ordinary jurisdiction⁹ as well as in the constitutional¹⁰ case-law. For example, in 2025 alone, the Albanian Constitutional Court made explicit references to EU law in the following decisions: Decision No. 8 of 21 February 2025; Decision No. 33 of 20 May 2025; Decision No. 45 of 31 July 2025; and Decision No. 49 of 24 September 2025. Thus, in four out of seventy-five legal decisions, so, more than 5% of the cases, the Albanian Constitutional Court used the EU law as a source of interpretation. This number is quite high considering that Albania is not part of the EU, and it opened all the EU integration chapters only in November 2025.

This paper aims to answer the following research question: considering that BIM is also adapted in Albania,¹¹ can the Italian rules of legal BIM be used as a

⁴ European Commission, International Public Procurement – Single Market <https://single-market-economy.ec.europa.eu/single-market/public-procurement/international-public-procurement_en>.

⁵ European Commission, Public Procurement – Single Market <https://single-market-economy.ec.europa.eu/single-market/public-procurement_en>.

⁶ European Commission, Contracts Awarded by EU Institutions – SIMAP/TED <<https://ted.europa.eu/it/simap/contracts-awarded-by-eu-institutions>>.

⁷ Autorità Nazionale Anticorruzione (ANAC), Boom di appalti in Italia nel secondo quadrimestre 2023: meno gare e più affidamenti diretti <<https://www.anticorruzione.it/-/boom-di-appalti-in-italia-nel-secondo-quadrimestre-2023-meno-gare-e-più-affidamenti-diretti>>.

⁸ INSTAT – Instituti i Statistikave, Press Release: PBB Final 2023 dhe Gjysmë Final 2024 (Vjetore) <https://www.instat.gov.al/media/djup42zl/press-release_pbb-final-2023-dhe-qjysmë-final-2024_vjetore.pdf>.

⁹ D Veshi, 'The European Union's Impact on the Albanian Time-Share Contracts on Immovable Properties' (2025) 17(1) Journal of Civil Law Studies 15.

¹⁰ D Veshi, 'Albania's Judicial Approach to Consumer Protection and the Influence of EU Law' (2025) 1 Studi sull'Integrazione Europea 125–140.

¹¹ N Cane and T Kodra, 'The Adaption of BIM in the Albanian Construction Industry' (2022) Fourth International Conference on Architecture and Urban Design 60–69; I Mehmetaj, A Kalliri and M Ndini, 'Usage of Building Information Modeling (BIM) and Point Cloud for Post-Earthquake Damage Assessment: A Case Study from Albania' Book of Proceedings; V Prifti, 'Project Management and Implementation of BIM in a Project in Albania' (2024) 9(2) European Journal of Multidisciplinary Studies 93–101; N Vesho, M Guri and A Sava, 'The Use of Numerical Models Within the BIM Environment, for the Issue of Cultural Heritage Restoration. Buildings Designed Until 1940 in Albania' (2024) 4(1) Architecture, Structures and Construction 37–53; N Vesho, 'A Methodology on the Treatment of the Issue of Cultural Heritage Restoration in Tirana, Period 1920–40: BIM Modeling, Seismic Simulation and Theoretical Interpretations' (2022).

model for the Albanian lawmakers? In order to answer this question, there is a need to introduce readers with BIM and legal BIM and civil relations within the BIM contract.

The novelty of this paper is that it fills the gaps in the literature in this field. In other words, while the traditional BIM literature focuses on natural science,¹² recently, scholars have also focused on legal BIM.¹³ Nevertheless, this contribution aims to understand if the Italian rules of BIM can be used as a model for the Albanian lawmakers. At the moment, there is no literature on legal BIM in the Albanian contexts. However, Albanian civil engineers have underlined lack of information and clear guidelines for the use of BIM in companies in Albania.¹⁴

This research is divided as follows: while Sect. II introduces readers with the basic knowledge of BIM, Section III studies the introduction of legal BIM in Albania by comparing it with the Italian model. In the conclusions, this research reviews the results and suggest the possibility to introduce the Italian model to the Albanian legislation.

2. From BIM to Legal BIM: A Comparative Approach.^{*b}

This section introduces readers with BIM. It answers the following questions: what is BIM from a civil engineering approach? Do judges know what BIM is? In other words, this Section studies BIM from a civil engineering approach. In addition, it shows the absence of knowledge about BIM by lawyers and judges. Furthermore, in its concluding section, the analysis briefly highlights instances in which lawmakers themselves lacked sufficiently detailed technical knowledge.

^{*b} The author of this paragraph is N. Llagami.

¹² H Gao, C Koch and Y Wu, 'Building Information Modelling Based Building Energy Modelling: A Review' (2019) 238 *Applied Energy* 320–331; R Bogue, 'What Are the Prospects for Robots in the Construction Industry?' (2018) 45(1) *Industrial Robot: An International Journal* 1–6; YWD Tay and others, '3D Printing Trends in Building and Construction Industry: A Review' (2017) 12(3) *Virtual and Physical Prototyping* 261–276; AB Mokhal, S Deshpande and SS Kashid, 'Green Building Materials: A Way Towards Sustainable Construction' (2015) 4(4) *International Journal of Application or Innovation in Engineering and Management* 244–248.

¹³ C Eastman, *Il BIM: Guida completa al Building Information Modeling per committenti, architetti, ingegneri, gestori immobiliari e imprese* (Hoepli 2016); A Pavan, C Mirarchi and M Giani, *BIM: metodi e strumenti. Progettare, costruire e gestire nell'era digitale* (Tecniche Nuove 2017); GM Di Giuda and others, *Il BIM per la gestione dei patrimoni immobiliari: Linee guida, livelli di dettaglio informativo grafico (LOD) e alfanumerico (LOI)* (Hoepli 2017); S Garagnani, 'Il BIM dell'esistente. Verso la digitalizzazione evoluta del patrimonio costruito' (2019) 3 *BIM – Oggi – Italia* 47–60; G Dell'Acqua, *BIM per infrastrutture. Il Building Information Modeling per le grandi opere lineari* (EPC Editore 2018); R Paparella and C Zanchetta, *BIM e digitalizzazione del patrimonio immobiliare* (Società Editrice Esculapio 2020); R Picaro, *Il Building Information Modeling. Referente di obblighi e responsabilità* (Edizioni Scientifiche Italiane 2019); R Picaro, 'Notazioni di ermeneutica contrattuale evocate dalla digitalizzazione dei processi costruttivi' (2018) *Nuove Autonomie* 469–512; M Tiberi, 'L'uso degli strumenti elettronici specifici (Building Information Modeling) nei contratti pubblici' (2019) 429–453; A Ferrara and E Feligioni, *BIM e Project Management. Guida pratica alla progettazione integrata* (Dario Flaccovio Editore 2019).

¹⁴ V Prifti, 'Project Management and Implementation of BIM in a Project in Albania' (2024) 9(2) *European Journal of Multidisciplinary Studies* 93–101.

The methods applied in this Section include critical legal reasoning, interdisciplinary approach, case-law analysis, and legal comparison. In the case of BIM, interdisciplinary methods are necessary in order to base legal arguments.¹⁵ Although continental Europe is not part of the common law system, the doctrine has shown the importance of judicial powers regarding legal BIM in Italy.¹⁶

Without delving into technical specifics, BIM may be defined as a comprehensive digital repository of information encompassing all data relevant to a building throughout its entire life cycle. It integrates, inter alia, data relating to architectural design, structural and mechanical engineering, construction processes, and facility management. In this sense, BIM functions as a centralized information system that consolidates and continuously updates construction-related data. From a functional perspective, BIM is intended to overcome the limitations inherent in traditional two-dimensional design tools,¹⁷ particularly those concerning spatial coordination,¹⁸ interoperability, and effective communication among the various stakeholders involved,¹⁹ as well as deficiencies in data exchange and information consistency.²⁰

For explanatory purposes, legal scholarship generally distinguishes between two BIM models: federated and integrated.²¹ In a federated BIM system, each discipline develops a separate model, which is later coordinated with the others to detect conflicts. Integrated BIM, by contrast, relies on a single shared model, enabling all participants to work simultaneously without disciplinary separation.

However, not all legal practitioners possess a clear understanding of the nature and scope of BIM. This lack of familiarity is largely attributable to the fact that the prevailing body of literature approaches BIM predominantly from a civil and construction engineering perspective, rather than from a legal or contractual standpoint. The doctrine has demonstrated cases where lawyers or judges have not correctly defined BIM.

¹⁵ T Hutchinson, 'The Doctrinal Method: Incorporating Interdisciplinary Methods in Reforming the Law' (2015) 8 *Erasmus Law Review* 130.

¹⁶ E Koka and others, 'Legal BIM in Italy: An Administrative Case-Law Approach' (2025) 9(1) *Bratislava Law Review* 113–134; D Veshi and others, 'Administrative Judicial Approach to Legal Building Information Modelling in Italy: Application of an Interdisciplinary Approach' (2025) 25(2) *Hrvatska i komparativna javna uprava: časopis za teoriju i praksu javne uprave* 239–264.

¹⁷ W Sher and others, 'Heading into New Virtual Environments: What Skills Do Design Team Members Need?' (2009) 14 *Journal of Information Technology in Construction* 17–29; G Aranda-Mena and others, *BIM National Guidelines and Case Studies*, Cooperative Research Centres (CRC) for Construction Innovation, Report No. 2007-02-EP (Melbourne, 2008).

¹⁸ B Jereb, 'Software Describing Attributes' (2009) 31(4) *Computer Standards & Interfaces* 653–660; G Winch and G Deeth, 'Managing CAD in Architectural Practice' (1994) 2(4) *Automation in Construction* 275–280.

¹⁹ K McKinney and M Fischer, 'Generating, Evaluating and Visualizing Construction Schedules with CAD Tools' (1998) 7(6) *Automation in Construction* 433–447.

²⁰ A Borrmann and others, *Building Information Modeling: Why? What? How?* (Springer International Publishing 2018).

²¹ D Veshi, C Venditti and R Picaro, 'Building Information Modelling in Italy: An Interdisciplinary Approach' (2023) 3 *Rivista Giuridica di Urbanistica* 541–565.

From a legal perspective, lawyers – both in Italy and in other jurisdictions – have frequently demonstrated a conceptual misunderstanding of BIM, often conflating it with distinct legal or technical notions. In the United States, for example, counsel for both parties have, in several disputes, treated claims arising from the use of BIM as if they were traditional “changed work” claims,²² thereby subsuming BIM-related issues within pre-existing contractual categories without adequately acknowledging the specific informational and collaborative nature of the model.

A similar, albeit differently articulated, confusion has emerged in the Italian context. In at least one case,²³ counsel for the applicant conflated BIM itself with the software tool employed to manage it, or with applications designed merely to collect conceptual data and define data-exchange standards for information intended to be incorporated into a potential BIM model. Such an approach overlooks the distinction between BIM as an integrated information environment and the individual digital tools or data formats that may support its implementation.

From a judicial perspective, similar conceptual and terminological issues have also been identified in the case-law of other national jurisdictions within the European Union,²⁴ such as Germany,²⁵ Greece,²⁶ Poland.²⁷ In these jurisdictions as well, judicial and legal discourse has at times revealed a tendency to adopt fragmented or imprecise definitions of BIM, often assimilating it to adjacent technical or organizational notions rather than recognizing it as a distinct working method.

In addition, it is noteworthy that a 2025 study²⁸ focusing on the Italian legal system analyzed fifty-four judicial decisions, in addition to one incidental proceeding, delivered by the administrative courts. The analysis was based on all decisions available on the official website of the Italian administrative justice up to February 2024. Although BIM should be properly understood as a working method, a significant number of judicial decisions employed concepts that are merely related or analogous to BIM, while attributing to them different legal or functional meanings. More specifically, several courts referred to BIM using alternative notions – such as modality, software, system, project, methodology, model, or technology – rather than expressly qualifying it as a method. This terminological inconsistency suggests a degree of conceptual uncertainty within judicial reasoning, which may have implications for the legal classification of BIM and the consistency of case law.

²² *North American Mechanical, Inc. v Walsh Construction Co. II, LLC*, Case No 132 (US).

²³ Council of State, Decision No 07805/2019, Session V (13 November 2019).

²⁴ D Veshi, ‘Legal Aspects of BIM and Civil Law Across Different Jurisdictions’ (2026) 18(1) *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 04525083.

²⁵ Regional Court (LG) Paderborn, Judgment of 6 July 2017, Case No 3 O 418/16; Public Procurement Chamber of Lower Saxony, Decision of 5 September 2017, Case No VgK-26/2017.

²⁶ Administrative Court of Appeal of Athens, Section IV, Decision No 1748/2022.

²⁷ Provincial Administrative Court of Poznań, Decision No 635/21, 27 January 2022; District Court of Warsaw, XXIII Division for Commercial Appeals and Public Procurement, Decision, 15 April 2021.

²⁸ E Koka and others, ‘Legal BIM in Italy: An Administrative Case-Law Approach’ (2025) 9(1) *Bratislava L Rev* 113–134.

Although legal BIM will be examined in Section III, it should be emphasized that lawmakers themselves have often misunderstood the interdisciplinary nature of BIM. For example, the EU legislator included BIM among the rules applicable to communication (Article 22(4) of Directive 2014/24/EU). While BIM incorporates multiple datasets, it is not, in itself, a means of communication. Nevertheless, it shall be mentioned that at the time of the adoption of the Directive in 2014, BIM had not yet been conceptualized as a distinct legal domain.

A similar conceptual confusion could be observed in the Italian legal framework, where the Parliament initially conflated method with methodology (Article 2(5), Annex I.13 of the new Code of Public Contracts of April 2023).²⁹ This ambiguity was later addressed by Legislative Decree No. 209 of 31 December 2024, which corrected the terminology by explicitly referring to BIM as a method.

To sum up, although the majority of the literature on BIM is concentrated in the natural and technical sciences, legal scholarship has highlighted a persistent lack of an interdisciplinary approach among judges, legal practitioners, and lawmakers in this field. In other words, BIM is a working method in construction industry. This section showed various cases where lawyers, judges as well as lawmakers lack interdisciplinary knowledge on BIM.

3. Legal BIM: From EU law to national legislations in Italy and in Albania.*^c

This Section provides a brief overview of legal BIM in Italy, as a response to the EU recommendation on the implementation of BIM in public procurement procedures. It then examines the similarities and differences between the Italian and Albanian public procurement frameworks. In other words, this Section raises the following research questions: Which is the importance of legal BIM? Considering that legal BIM has been established in the Italian legal system, can the Italian model be applied for Albania?

The methods applied in this Section include critical legal reasoning and legal comparison. In other words, considering that Albanian scientific output is ranked last in the European level,³⁰ the application of the foreign doctrine, or legal comparison, is fundamental. Additionally, the Italo-Albanian doctrine has demonstrated the impact of the Italian legislation in the Albanian codification.³¹

*^c The author of this paragraph is C. Venditti.

²⁹ D Veshi and others, 'Administrative Judicial Approach to Legal Building Information Modelling in Italy: Application of an Interdisciplinary Approach' (2025) 25(2) *Hrvatska i komparativna javna uprava: časopis za teoriju i praksu javne uprave* 239–264.

³⁰ Euronews Albania, *Albania Ranks Last in Europe for Scientific Research, According to Study* <<https://euronews.al/en/albania-ranks-last-in-europe-for-scientific-research-according-to-study/>>.

³¹ J Goxha and L Licaj, 'The Development of Albanian Legislation and the Codification Process During the Zogist Period' (2015) 11(31) *European Scientific Journal*; C Venditti, D Veshi and E Koka, 'The Transformation of Right to Property in the Post-Communist Period in Albania: The Impact of the Italian Civil Code in the Ways of Acquisition of Ownership in the Albanian Civil Code of 1994' (2020) 9(1) *Osservatorio del diritto civile e commerciale* 329–352.

With regard to the institutional introduction of legal BIM, Article 22(4) of Directive 2014/24/EU merely provides a procedural framework for the adoption of innovative electronic tools in public procurement. Based on this background, a significant step at the European level was taken in 2016 with the establishment of the EU BIM Task Group.³² This initiative was conceived as a platform for cooperation among national experts from the EU Member States, with the objective of fostering a shared and coordinated approach to the development and implementation of BIM across the Union.³³ Among its key recommendations, the Task Group expressly emphasized the need to align and harmonise national legal frameworks with BIM-related practices, particularly in the context of public procurement and construction regulation.

Building on this institutional background, a comparative study published in 2020 examined the extent to which BIM has been integrated into national construction sectors across the EU.³⁴ The study highlighted significant disparities among Member States, noting that certain jurisdictions – such as the United Kingdom, the Scandinavian countries, and the Netherlands – have developed more advanced and structured legal frameworks governing BIM. By contrast, the Italian legal system was positioned at an intermediate level of regulatory maturity, reflecting a partial but not yet comprehensive legal integration of BIM.

Focusing on the case of Italy, BIM was introduced with the Ministerial Decree (MD) no. 560 of 1st December 2017. This MD was based on Article 23(13) of the previous Code of Public Contracts,³⁵ which aligned the Italian legislation with the EU law (Article 22(4) Directive 2014/24/EU). This MD had two main problems. First, the MD was published almost 18 months after the deadline established in the Code of Public Contracts. Second, and more importantly, in cross-appeal opinion, the Council of State³⁶ considered the MD 560/2017 as not coherent with the Italian legislation since according to the Council of State, the MD 560/2017 is a regulation and – according to Article 17(3) Law no 400 of 23rd August 1988 – the opinion of the Council of State should have been required. As a result, since the Council of Ministers did not ask for this opinion, the MD 560/2017 is unlawful. Nevertheless, while the MD 312 of 2nd August 2021 modified the MD 560/2017 by confirming the previous position that the MD 560/2017 was not a regulation, in April 2023, the Italian legislator changed its position by confirming the approach of the Council of State. In other words, Article 43(5) Code of Public Contracts states that Allegation I.9 is abrogated once the MD of the Minister of Infrastructures and Transportations has been approved, after requesting the mandatory opinion of the Council of State.

Thus, while Article 22(4) of Directive 2014/24/EU merely encourages EU Member States to adopt legal frameworks for BIM, BIM is a mandatory

³² Global BIM Network, EU BIM Task Group <<https://globalbim.org/info-collection/eu-bim-task-group/>>.

³³ EU BIM Task Group, Handbook for the Introduction of Building Information Modelling by the European Public Sector (n.d.) <<https://eubim.eu/handbook/>>.

³⁴ C Panteli and others, 'Overview of BIM Integration into the Construction Sector in European Member States and European Union Acquis' (2020) 410 IOP Conf Ser: Earth Environ Sci <<https://doi.org/10.1088/1755-1315/410/1/012121>>.

³⁵ Italian Legislative Decree No 50 of 18 April 2016, Public Contracts Code.

³⁶ Council of State, Opinion No 01349/2019 of 18 April 2019.

requirement in Italy. Initially, this obligation was introduced through secondary legislation; however, in 2023, BIM requirements were established through a primary legal source. Furthermore, Legislative Decree No. 209 of 31 December 2024 amended the threshold for mandatory BIM in public procurement, raising it from 1 million euros to 2 million euros. It should be noted that, according to the Court of Justice of the European Union, at the EU level the term “legislation” must be understood in its broadest sense, encompassing legislative, regulatory, or administrative acts.³⁷ Accordingly, each Member State may determine the type of normative act that achieves the objectives of the EU acquis while ensuring full effectiveness of the relevant directive.³⁸

Based on this national background, regional legislation have also underlined the importance of BIM. For instance, Article 7(2)(h) Regional Law of Veneto no. 14 of 4th April 2019 states that without using BIM, under certain conditions, the existing volume of buildings can be increased by up to 25 percent, in the case of using BIM, the volume can be increased by up to 35%. Again, according to Article 5(3) Regional Regulation of Puglia no. 13 of 22nd May 2017, the use of BIM is a mandatory requirement since the project of a new purification plant is drawn up according to the use of specific electronic modelling methodologies and tools for infrastructures (Building Information Modelling) and with the assessment of the life cycle (Life Cycle Assessment) according to the provisions and regulations by current legislation. Thus, also at the regional level, the introduction of BIM has been incentivised.

On the contrary, in Albania a legal framework explicitly mandating the use of BIM has not yet been established.³⁹ At the EU level, however, Article 22 of Directive 2014/24/EU highlights the relevance of electronic means and, indirectly, the potential role of BIM in public procurement procedures. Albanian Law No. 162/2020 of 23 December 2020 On Public Procurement has harmonised domestic legislation with EU law. Indeed, the footnote to Law No. 162/2020 states that the law is partially approximated with Directive 2014/24/EU, as well as with Directive 2014/25/EU, Council Directive 89/665/EEC, and Council Directive 92/13/EEC. The corresponding provision of Article 22 of Directive 2014/24/EU has been transposed into Albanian law through Article 17 of Law No. 162/2020. Nevertheless, it must be underlined that Article 17 does not expressly mandate the use of BIM.

Despite the absence of an explicit legal obligation to implement BIM, the objective of aligning with EU law and promoting the digitalisation of public procurement procedures emerges clearly from several legislative developments.

First, Article 10(2) of Law No. 44/2015, the Administrative Procedures Code of the Republic of Albania, establishes a general principle according to which public authorities shall promote the possibility for parties to access public administration through electronic means. This provision enshrines digital accessibility as a fundamental principle of Albanian public administration.

³⁷ Joined Cases C-758/24 and C-759/24, para. 56

³⁸ C-404/17, paras. 28 and 35; Joined Cases C-758/24 and C-759/24, paras. 59 and 62

³⁹ BIMobject, Mandats BIM 2025: Quels sont les pays où le BIM devient obligatoire? <<https://business.bimobject.com/fr/blog/mandats-bim-2025-pays-obligatoires/>>.

Second, Article 3(19) of Law No. 107/2014 On Territorial Planning and Development defines “traditional means of information” as including, inter alia, electronic registers and electronic mail. Furthermore, Article 9(2) of the same law assigns to the National Agency for Territorial Planning the responsibility to ensure compliance of territorial planning documents, at both central and local levels, through the provision of technical assistance, including the supply of basic electronic data and technical planning standards for the preparation of planning documents.

Third, Article 17(3) of Law No. 162/2020 On Public Procurements provides that, where contracting authorities communicate electronically, the electronic means of communication and their technical characteristics must be non-discriminatory, widely available, and interoperable with commonly used information and communication technology products. These principles mirror those established under Directive 2014/24/EU.

Fourth, the definitions of “innovation” and “electronic means” contained in Article 4(14) and Article 4(29) of Albanian Law No. 162/2020 correspond to those set out in Article 2(1)(12) and Article 2(1)(19) of Directive 2014/24/EU. Notably, innovation is understood as the implementation of a new or significantly improved product, service, or process, including new organizational methods or business practices: an interpretation broad enough to encompass BIM-related processes.

Fifth, Albanian Law No. 16/2024 of 8 February 2024, which amended Article 17 of Law No. 162/2020, significantly expanded the mandatory use of electronic means in public procurement. While, prior to February 2024, certain exceptions to electronic communication were permitted, the amended provision now establishes that all communication and exchange of information relating to procurement procedures, complaint handling, contract signature, and contract implementation shall be carried out using electronic means. In this context, the Electronic Procurement System has been formally established.

Nevertheless, Article 10 of Bylaw No. 285 of 19 May 2021 On the Approval of Public Procurement Rules (as amended by Decisions No. 710 of 24 November 2021, No. 498 of 1 August 2024, and No. 545 of 4 September 2024) still identifies limited cases in which communication may occur in written form. These exceptions appear to be strictly residual, covering situations where electronic means are not widely available or supported by commonly used applications; where file formats cannot be processed by open or widely available software or are protected by intellectual property rights; or where procurement procedures require the submission of models, designs, or mock-ups that cannot be transmitted electronically. However, it should be noted that, in light of the general principles of digital administration and fair competition, the use of proprietary formats would run counter to these core principles of modern public administration. Accordingly, such cases appear to be extremely residual.

In sum, BIM relates not only to construction techniques, but also to digitalisation and data management processes governed by the principles of non-discrimination, interoperability, and the use of open or widely accessible applications. In this respect, the definitions of “innovation” and “electronic means” contained in Article 4(14) and Article 4(29) of Albanian Law No.

162/2020 correspond to those set out in Article 2(1)(12) and Article 2(1)(19) of Directive 2014/24/EU. Moreover, the progressive incorporation of principles such as non-discrimination and digitalisation across different areas of Albanian legislation demonstrates a clear legislative orientation towards the future implementation of a legally structured BIM framework.

To sum up, while Italy has formally introduced the concept of legal BIM, Albania has not yet explicitly recognised or regulated its legal relevance. Nevertheless, in recent years the Albanian legislature has shown an increasing tendency to emphasise the importance of digitalisation in public procurement, as well as the potential introduction of innovative methodological approaches in procurement procedures.

4. Conclusions.^{*d}

This paper examines legal BIM through a comparative approach and highlights its growing importance within public procurement and construction law.

Although BIM has been used for several decades and the literature in civil engineering and architecture has extensively demonstrated its advantages, it was only with Directive 2014/24/EU that the use of instruments such as BIM was expressly facilitated in public procurement procedures. The Italian lawmaker went beyond this minimum requirement by making BIM mandatory for public procurement contracts exceeding EUR 2 million.

In Italy, BIM was initially introduced through secondary legislation and only later, in 2023, through primary legislation. This legislative technique is consistent with the case law of the Court of Justice of the European Union, which has repeatedly held that Member States are free to determine the form and type of normative acts used to achieve the objectives of the EU acquis, provided that the full effectiveness of the relevant directive is ensured.

At the regional level, the introduction of BIM has also been actively promoted. The paper discusses, inter alia, the Regional Law of Veneto and the Regional Regulation of Puglia, thereby illustrating the plurality of legislative forms through which BIM has been implemented within the Italian legal system.

The analysis further demonstrates that legal professionals – including lawyers, judges, and lawmakers – do not always possess a sufficiently comprehensive interdisciplinary understanding of BIM. As BIM is a construction working method, the research reviews several cases in which legal actors have conflated BIM with distinct concepts. In particular, judicial decisions have sometimes employed alternative notions – such as modality, software, system, project, methodology, model, or technology – when referring to BIM.

This conceptual uncertainty may partly stem from the fact that EU law introduced BIM within the regulatory framework governing electronic communication (Article 22(4) of Directive 2014/24/EU). Similarly, the original version of Article 2(5) and Annex I.13 of the new Italian Code of Public

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Contracts of April 2023 referred to BIM as a methodology rather than as a method. As is well known, while a methodology denotes a broader theoretical framework guiding the application of methods, a method refers to a specific procedure or technique. This ambiguity was subsequently resolved by Legislative Decree No. 209 of 31 December 2024, which corrected the terminology by expressly defining BIM as a method.

Albania aims to join the European Union by 2030. At present, however, BIM is not explicitly codified in Albanian national legislation, neither at the level of primary nor of secondary sources, notwithstanding the fact that civil engineering scholarship shows that BIM is already used in practice in Albania. Nevertheless, over the past decade, the Albanian lawmaker has demonstrated increasing interest in the digitalization of public administration through various legislative acts, including Law No. 44/2015 Administrative Procedures Code of the Republic of Albania, Law No. 107/2014 On Territorial Planning and Development, and, most importantly, Law No. 162/2020 On Public Procurement and its implementing by-laws. In this framework, digitalization and electronic communication have been established as general principles of Albanian public administration. Moreover, insofar as BIM indirectly relates to innovation and electronic means – particularly with respect to non-discriminatory access, wide availability, and interoperability – Albanian legislation has largely replicated the corresponding EU-law provisions.

The Italian model of legal BIM is of particular relevance for the Albanian lawmaker for two main reasons. First, Italy introduced BIM at an early stage, beginning in 2017, and progressively adapted the regulatory framework – through MD No. 560/2017, MD No. 312/2021, the Code of Public Contracts, and its amendment by Legislative Decree No. 209 of 31 December 2024 – to the concrete needs of the construction industry as well as to the administrative capacity of public authorities.

Second, Albanian courts have repeatedly referred to Italian legislation and case law as interpretative sources when construing domestic law. By way of example, in Decision No. 40 of 17 June 2025, the Albanian Constitutional Court expressly relied on the case law of the Italian Court of Cassation. In particular, the Court observed that, according to the Italian Court of Cassation, the maximum time limits laid down in Article 303 of the Italian Code of Criminal Procedure concerning personal security measures involving deprivation of liberty apply to pre-trial detention in general, rather than exclusively to detention in prison. Through this reasoning, the Albanian Constitutional Court explicitly adopted the interpretative approach developed by the Italian Court of Cassation, thereby confirming the significant influence of Italian legislation and jurisprudence within the Albanian constitutional adjudicatory practice.