

LEGAL BIM IN ITALY: AN ADMINISTRATIVE CASE-LAW APPROACH

Assoc. Prof. Enkelejda Koka
University of Tirana, Faculty of Law
Department of Public Law
Rruga Mitro Tutulani
Tirana, Albania
enkelejda.koka@fdut.edu.al
ORCID: 0009-0003-5342-9900

Assoc. Prof. Enida Bozhoku
University Qiriazhi
Public and Criminal Law Department
Rruga Taulantet, Kodër-Kamëz, 1029
Tirana, Albania
enida.bozhoku@qiriazhi.edu.al
ORCID: 0000-0003-3986-5426

Prof. Dr. Carlo Venditti*
carlo.venditti@unicampania.it
ORCID: 0009-0001-1272-1257

Prof. Dr. Raffaele Picaro*
raffaele.picaro@unicampania.it
ORCID: 0000-0003-4656-8016

PhD. Cand. Julian Bashmili*
julian.bashmili@unicampania.it
ORCID: 0009-0006-2124-8218
(Corresponding Author)

*all at University of Campania
Luigi Vanvitelli
Department of Law
via Mazzocchi, 68
Santa Maria Capua Vetere, Italy

Assoc. Prof. Denard Veshi
Bedër University, Department of Law
Rr. Jordan Misja, Tirana, Albany
dveshi@beder.edu.al
ORCID: 0000-0003-4537-5917

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Abstract: *The evolution of new technologies in the construction sector has led to a new building method. In concrete terms, Building Information Modelling (BIM) has revolutionised the construction work method. Although the most significant BIM literature focuses on natural sciences, in Italy, BIM is also heavily used in public procurements. While the EU law, Article 22(4) Dir. 2014/24/EU, stimulated the application of building information electronic modelling tools, in 2017, in Italy, a Ministerial Decree, required the use of it for all public tenders over 100 million EUR from January 2019, which every year would have decreased until January 2025 with 1 million EUR (Article 6 MD no. 560 of 1st December 2017). Although this Ministerial Decree is not in force anymore, the new Code of Public Contracts of April 2023 confirmed the threshold and the temporal view. In other words, the Code of Public Contracts of 2023 requires BIM for all public tenders over 1 million euros starting from January 2025. So, while the EU only incentivised EU Member States, the Italian legislator included BIM as a mandatory requirement through a secondary source in 2017 or a primary source in 2023. This research values the role of Italian administrative judges in legal BIM. Its goal is to uncover the position of Italian judges that can also be used by other judges when they deal with similar issues. In addition, it considers whether new technologies have changed the approach that judges use when deciding public procurements where BIM is included.*

Keywords: *Administrative Jurisdiction; BIM; Case-Law Study; Italy; Public Procurements*

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1. INTRODUCTION

Law and new technologies impact each other. This is also the case in the construction industry, where new technologies have led to a new construction method, called Building Information Modelling (BIM).

Without going into the details of the scientific literature (among others, Romano, 2021; Paparella and Zanchetta, 2020; Tiberi, 2019; Garagnani, 2019; Ferrara and Feligioni, 2019; Guida, 2019; Picaro, 2018, 2019; Dell'Acqua, 2018; Mastrodonato, 2017; Pavan, Mirarchi and Giani, 2017; Caffi et al., 2017; Maltese, 2017), BIM should be considered as an information store of all the data related to all aspects of the building; among others, it includes information on mechanical engineering, civil engineering, architecture, structure, and the construction of building life. Thus, BIM keeps all construction information. Simply put, BIM aims to resolve the previous problems related to 2D application (Sher, et al., 2009; Aranda-Mena, et al., 2008), such as issues related to space (Jereb, 2009; Winch and Deeth, 1994) or effective communication between different levels of end-users (McKinney and Fischer, 1998) or data exchanged (Borrmann, 2018).

Law is shaped by technology, and law can stimulate innovative technologies. Technology creates new possibilities, and people engage in new forms of conduct (Moses, 2011), which shall be ruled by law. Obviously, technological changes occur within a broader social preference (Pinch and Bijker, 1984). Focusing on the case of BIM, the literature has argued whether the traditional rules of the Italian civil code can resolve problems related to BIM contracts, particularly in the case of integrated BIM. In more concrete terms, Italian legal scholars (among others, Picaro, 2024, 2020, 2019, 2018; Racca, 2019; Tiberi, 2019) have studied legal BIM by also proposing a new approach to BIM contracts, which they have called the relational approach (Veshi, Venditti, Picaro and Bashmili, 2024; Veshi, Venditti and Picaro, 2023). This approach should be considered a subsidiary and can be applied if the traditional approach does not resolve the problems of that specific case. The relational approach is based on collaborative technologies and the typical BIM contract, *alliance*. This approach values the construction costumes and usages that allow the agreement to be interpreted according to new, unplanned, and unexpected construction situations.

In addition, the law shapes how people develop technology (Mayer-Schonberger, 2010) and can incentivise their use. Focusing on the case of BIM, both EU law and the Italian legal system have stimulated the introduction of BIM. At the EU level, Article 22(4) Dir. 2014/24/EU states: *For public works contracts and design contests, Member States may require the use of specific electronic tools, such as building information electronic modeling tools or similar*. Although the *acquis communautaire* left discretion to the Member States to include or not BIM as part of their national legislations, the Italian legislator introduced BIM with the Ministerial Decree (MD) no. 560 of 1st December 2017, a secondary legal source. While the EU law did not require the introduction of BIM, the Italian MD 560/2017 required it. In other words, starting in January 2019, all public procurements of over 100 million EUR shall include the use of BIM (Article 6 MD 560/2017).¹ The economic threshold was reduced every year. Indeed, since January

¹ For clarity it shall be stated that in an incidental proceeding (Council of State, Opinion, No. 01349/2019 of 18/04/2019), the Council of State underlined that the MD 560/2017 was not coherent with the Italian legislation since the Italian government did not request the mandatory opinion of the Council of State (established in Article 17(3) Law no 400 of 23rd August 1988). MD 560/2017 was modified with MD no. 312 of 2 August 2021. The MD 312/2021 confirmed the decision of the legislator of 2017 by underlying that MD 560/2017 was not a regulation, the Article 43(5) of the new Code of Public Contracts of April 2023 states that

2025, BIM has been mandatory for all public procurements of over 1 million EUR (Article 43 Code of Public Contracts of April 2023). Not only national law but also regional legislation has positively seen BIM. For instance, Article 7(2)(h) Regional Law of Veneto no. 14 of 4th April 2019² or Article 5(3) Regional Regulation of Puglia no. 13 of 22nd May 2017³ have incentivised the use of BIM.

This contribution applies an administrative case-law study to legal BIM in Italy. The investigation focuses on the case of Italy since the new Italian Code of Public Contracts of April 2023 underlines the mandatory requirement of BIM for public procurements over 1 million EUR from January 2025. The case-law approach is used since, although Italy, as part of continental Europe, is based on a civil-law system, the Consultative Council of European Judges has already observed the importance of legal decisions in countries based on a civil law system (Council of Europe, 2008). Moreover, during their legal reasoning, sometimes, Constitutional Courts also consider the decisions of other Constitutional Courts (Passaglia, 2022).⁴ By considering that the law cannot change as fast as the technological advances (Moses, 2011), courts, in the case of BIM, as part of new technologies, might "substitute" national lawmakers.

This research has examined 54 legal decisions, in addition to the opinion of the Council of State regarding MD 560/2017, which was uncovered above. Nevertheless, while Annex 1 uncovers all of them, the contribution only focuses on the essential principles of Italian jurisprudence. It shall be stated that the vast majority of the legal decisions are decisions, while few ordinances were found. The judicial review has two goals. First, and more importantly, it informs readers regarding BIM and administrative law since legal BIM is a new discipline of study. The contribution is written in English since judges from other countries might face similar problems, while the literature has shown that several times, judges also consider the decisions of foreign judges (Passaglia, 2022). Second, while new technologies might have shaped the civil relations within the BIM contract (Veshi, Venditti, Picaro and Bashmili, 2023), this contribution interrogates if judges have applied a conservative approach to public procurements where BIM is included.

The structure of this contribution is as follows: Section II focuses on discretionary powers of the public administration in bids where BIM is included. In addition, Section III uncovers legal decisions dealing with interpreting invitations for bids. Moreover, Section IV studies the judicial approach regarding BIM certificates. In conclusion, the research reviews the Italian legal decisions by considering if judges have applied an innovative approach or used identical or similar interpretative rules to public

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 (Article 43(5) Code of Public Contracts). Although it is not part of this contribution, it shall be underlined, for clarity purpose, that there is an ongoing discussion if MD 312/2021, with the goal to not leave a legal vacuum, will be applied until there will be a new MD.

² According to the Regional Law of Veneto, 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%.

³ According to the Regional Regulation of Puglia, 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.

⁴ According to this study conducted with the Italian Constitutional Court, the average impact of rulings with references between 2000 to 2021 is 0.9%. However, in the last five years, there has been an increase with a peak of 3.1 % in 2019. Concrete examples of them are: Italian Constitutional Court, no. 10/2015 of 09 February 2015 where the Constitutional Court used the jurisprudence of Austria, Germany, and Spain.

procurements where BIM is included since BIM is part of new technologies in the construction industry.

2. LEGAL BIM AND CASE-LAW IN ITALY: THE DISCRETIONARY POWERS

This Section studies the legal decisions of Italian jurisprudence regarding BIM, focusing on the case of discretionary powers. It shall be explained that the Italian jurisdiction is divided between ordinary and administrative jurisdictions. Whereas the authors of this study did not find any legal decisions from ordinary Italian judges, several legal decisions were found on public tenders, part of the administrative jurisdiction.

First of all, the national and international literature agree that BIM has several advantages compared to CAD (Veshi, Venditti and Picaro, 2023). The main problem with CAD was the digital representation of geometry. In other words, there was a need to represent the components of a building rather than just the lines and arcs used to draw them (Ibrahim, 2006). Although BIM is a recent approach to the construction method (Volk, 2014; Eadie et al., 2013; Arayici, 2008), it offers users unification of the design approaches, independently from design updates, by guaranteeing consistency and coordination of the project between different stakeholders (Bryde, Broquetas and Volm, 2013). However, in Italy, as explained in the introduction, legal BIM – or better, the introduction of BIM in the legal system – is a recent event done only in 2017, modified in 2021, and then also with a primary source in 2023.

So, when the invitation for bids does not establish specific rules regarding BIM and the presentation of BIM is not a mandatory requirement established in the public procurement, the BIM partly presented in 2D, even with some possible *clash detections* that can be resolved in the execution phase, can be considered as a BIM model.⁵ In addition, when BIM is not a mandatory requirement for the invitation for bids, the plaintiff shall prove that the application of BIM, rather than CAD, would have brought further advantages to the entire project as a whole and not just to single parts of it. In other words, the Court will dismiss the case if the plaintiff's claim is based only on the fact that the plaintiff presented BIM while the winner presented just CAD without proving that, in that concrete case, the project, as a whole, would benefit more from the application of BIM rather than CAD.⁶

Second, and more importantly, the public administration has technical discretion on public procurements when applying the BIM method. Technical discretion is one of the main principles of administrative law. However, the principle of results is the principal value that shall orient the use of the discretionary powers (Article 1(4) Code of Public Administration). It shall be underlined that the principle of results is the mixture of the administrative tenets of efficiency, effectiveness, and cost-effectiveness in addition to good performance (Article 1(3) Code of Public Administration). In other words, the technical discretion of the public administration is limited by other principles that aim to help the public administration choose the course of action that best suits the public interest. Thus, judicial review of administrative discretion is limited. This is also the view of the EU Court of Justice that limits the judicial review to the "manifest error of assessments or misuse of powers."⁷ In other words, judicial review is limited to the separation of powers: while law limits the space of discretion without commanding the

⁵ Regional Administrative Tribunal of Lombardia, Decision, Session I, No. 01210/2017 of 29/05/2017.

⁶ Council of State, Decision, Session V, No. 02276/2019 del 08/04/2019; and Regional Administrative Tribunal of Marche, Decision, Session I, No. 00398/2018 of 30/05/2018.

⁷ CJEU, judgment of 11 July 1985, Remia and Others v. Commission, Case 42/84, ECLI: EU:C:1985:327, para 34.

choice made therein, courts enforce the law without attaching the technical action chosen, within the discretionary powers that the public administration, within the legal determinations.⁸

This is also applied in public procurements where BIM is used as a construction method. For instance, while the plaintiff, the third-best bidder, filed a lawsuit against the Public Administration for an arbitrary position, the Court dismissed the case since the review of the administrative judge on the exercise of the evaluation activity by the commission cannot replace that of the public administration, except in the case of an abnormality that could not be recognised in the concrete case.⁹ Again, the fact that a participant, the second-best offer, in an invitation for bids was the only one that presented BIM does not give the right to the participant to have higher points than the winning offer, if the invitation for bids includes, as a voice of the public procurement, not only the inclusion of BIM but also the clarity of presentation or the use of different software. The public administration, within the legal determinations, chooses the best offer.¹⁰ In addition, if both participants, the plaintiff (the second-best bidder) and the counter-interested party (the winning offer), presented BIM, the public administration can attribute higher points to the winning offer since the winning offer included in his offer a higher perceptuality of recycling products. This falls within the technical discretion of the public administration.¹¹

As established by doctrine¹² and the EU jurisprudence,¹³ the judge cannot substitute himself for the technical discretion of the public administration. In concrete terms, even if BIM is applied as a construction method in public procurement, "the evaluation of the offers and the attribution of scores by the judging commission fall within the broad technical discretion granted to this body."¹⁴ The judge can exercise a substitute review within the "limits of excess power due to the abnormality of the technical choices."¹⁵ The discretionary powers also remain within the parameters of the technical capacity of the participants and specific subjective requirements for participation without entering into the case of excess powers due to the abnormality of the technical choices. In other words, "by constant jurisprudence, in the sector of public procurement, the technical evaluations of the contracting authority, as an expression of technical discretion, are removed from the legitimacy review of the administrative judge, unless they are manifestly illogical, irrational, unreasonable, arbitrary or based on an equally clear and manifest misrepresentation of the facts"¹⁶ [authors' translations]. Thus, the Public

⁸ CJEU, judgment of 11 September 2002, Pfizer Animal Health v. Council, Case T-13/99, ECLI: EU:T:2002:209.

⁹ Regional Administrative Tribunal of Sicilia, Decision, Session II, No. 00529/2023 of 16/02/2023.

¹⁰ Regional Administrative Tribunal of Toscana, Decision, Session I, No. 00977/2022 of 02/08/2022.

¹¹ Council of State, Decision, Session III, No. 6058 of 02/09/2019.

¹² Among others, Koven (2024); Singh (2022); Milshin, et al. (2022); Sultan and Azeem (2023).

¹³ Among others, CJEU, judgment of 11 July 1985, Remia and Others v. Commission, Case 42/84, ECLI: EU:C:1985:327 and CJEU, judgment of 11 September 2002, Pfizer Animal Health v. Council, Case T-13/99, ECLI: EU:T:2002:209.

¹⁴ *.....la valutazione delle offerte e l'attribuzione dei punteggi da parte della commissione giudicatrice, rientrano nell'ampia discrezionalità tecnica riconosciuta a tale organo.* Council of State, Decision, Session V, No. 02276/2019 of 08/04/2019.

¹⁵ *..... una erroneità o di un eccesso di potere per sviamento e travisamento dei fatti e dei presupposti.* Council of State, Decision, Session V, No. 02276/2019 of 08/04/2019.

¹⁶ *Per giurisprudenza costante, nel settore degli appalti pubblici, le valutazioni tecniche della stazione appaltante, in quanto espressione di discrezionalità tecnica, sono sottratte al sindacato di legittimità del giudice amministrativo, salvo che non siano manifestamente illogiche, irrazionali, irragionevoli, arbitrarie ovvero fondate su di un altrettanto palese e manifesto travisamento dei fatti.* Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00452/2017 del 30/05/2017.

Administration has discretion regarding the attribution of points without entering the case of abnormal evaluations.¹⁷ This discretion is also given regarding evaluating two different offers, except if there is a gross error of fact, manifest illogicality, or unreasonableness. In other words, the plaintiff did not prove that its offer was so much better than the counter-interested party (as for complaints relating to the team or design) or on elements, in reality, common to both offers (as for the use of the BIM) that the public administration could have been in a gross error of fact, manifest illogicality, or unreasonableness.¹⁸

Although the public administration has discretionary powers, this does not mean that transparency in the evaluation might be missing. For instance, in an invitation for bids, where BIM was included, while the rules of the public procurements divided it into various tender specifications, the commission had signed the points as a whole offer. In other words, "the work of the commission does not allow [the judges] to understand, and possibly dispute, which scores were attributed to the individual parts of each attached project, as provided for in Annex G to the tender specifications."¹⁹ However, contrary to this decision, the Court has underlined that "by constant jurisprudence, the ... evaluation has a global and synthetic nature, as it cannot result in a fragmentation of the individual cost items..., or the search for specific inaccuracies in the indication of each element of the offer, and constitutes an exercise of technical appreciation, not questionable except for illogicality, manifest unreasonableness, arbitrariness"²⁰ [authors' translations]. Although these two legal decisions might seem different, it appears that the specification of points in sub-categories is required only when the invitation for bids requires it.

Nevertheless, in administrative law, the plaintiff shall prove its claims. For instance, while the plaintiff filed a lawsuit because the winning bid, among others, lacked "a correct methodological approach from a historical-critical-conservative point of view, nor can the use of 4D BIM software be considered an improvement, as it is the basis of every design software"²¹ [authors' translations], the Court dismissed the case since the plaintiff did not prove that the winning bid had margins of unreliability. In other words, the plaintiff's reasoning remains merely questionable.²² Again, in another case, if the plaintiff questions that there has been a short time for assessment of all offers, and this might be considered a problem, the plaintiff shall prove it, in this case, it did not do that.²³ Moreover, sometimes, the Court dismisses a case since even if the Public Administration awards

¹⁷ Regional Administrative Tribunal of Lazio, Decision, Session IV, No. 17947/2022 of 30/12/2022.

¹⁸ Regional Administrative Tribunal of Toscana, Decision, Session I, No. 01438/2019 25/10/2019.

¹⁹ *Il lavoro della commissione non consente di comprendere, ed eventualmente contestare, quali punteggi siano stati attribuiti alle singole parti di ciascun progetto allegato, come previsto nell'allegato G al disciplinare di gara.* Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00640/2018 of 23/07/2018.

²⁰ *Per costante giurisprudenza, la ... valutazione ha natura necessariamente globale e sintetica, non potendo risolversi in una parcellizzazione delle singole voci di costo ..., ovvero nella ricerca di specifiche inesattezze nella indicazione di ogni elemento dell'offerta, e costituisce esercizio di apprezzamento tecnico, non sindacabile se non per illogicità, manifesta irragionevolezza, arbitarietà.* Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00564/2021 del 21/06/2021.

²¹ *è carente di un approccio metodologico corretto dal punto di vista storico-critico-conservativo né l'utilizzo del software di uso del BIM in 4D è considerabile come miglioria, in quanto alla base di ogni software di progettazione.*

²² Regional Administrative Tribunal of Puglia, Decision, Session II, No. 00106/2022 del 20/01/2022.

²³ Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 del 07/01/2020.

the points related to BIM to the plaintiff, the ranking will still not change, and the second-best bidder would not be the winning bid.²⁴

Last but not least, it shall be mentioned that the general procedural rules of territorial competence, termination of the lawsuit, preventive measures, and bureaucratic problems are applied as well as for the application of the principle of secrecy of offers and protection of competition. If the invitation for bids includes BIM and is executed in many lots, the territorial competence is one of the headquarters of the administrative authority responsible for the exercise of the administrative power, not where the act has its effects or other criteria.²⁵ In addition, if the public administration, in self-defence, annuls the administrative process, even if the invitation for bids includes BIM, there is still the termination of the case if the public administration has annulled the administrative proceeding.²⁶ Furthermore, it is possible to give preventive measures to invitations for bids that include BIM.²⁷ Further, it shall be mentioned that the absence of publishing the provision appointing the commission member and their CVs is only a bureaucratic problem and does not affect their ability to understand the BIM method.²⁸ Moreover, using identical BIM – in the concrete case, 139 out of 169 lines are identical, also in the punctuality, which means that both models are identical – leads to exclusion from the tender because the offers come from the same decision-making centre. This means violating the principle of secrecy of offers and protection of competition.²⁹

To sum up, BIM is used in different public procurements, although this was optional in several invitations for bids. From the review of the Italian jurisprudence in regard to discretionary powers, this research showed that this cardinal administrative principle is also applied in cases where public procurements use BIM.

3. LEGAL BIM AND CASE-LAW IN ITALY: INTERPRETATION OF INVITATIONS FOR BIDS

This Section focuses on several cases related to interpreting the invitation of bids. The doctrine is divided regarding the interpretation of the invitation for bids: literal interpretation and theological interpretation (Monteduro, 2009). While the first interpretation values the objective meaning of the words, the second considers the general administrative principles, in particular, the public interest. In other words, the literal interpretation does not allow the judge to attribute to the words a different meaning than the one established in their literal interpretation. This is also the common interpretation given by the majority of the judges.³⁰ A minor group of judges agrees that the invitation of bids should be interpreted according to that interpretation that aims to

²⁴ Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 del 07/01/2020. Regional Administrative Tribunal of Lazio, Decision, Session II, No. 09178/2018 del 06/09/2018. Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

²⁵ Regional Administrative Tribunal of Campania, Ordinance, Session II, No. 01144/2020 of 15/09/2020.

²⁶ Regional Administrative Tribunal of Campania, Ordinance, Session I, No. 03249/2020 of 22/07/2020.

²⁷ Regional Administrative Tribunal of Campania, Decision, Session I, No. 03779/2021 of 07/06/2021.

²⁸ Regional Administrative Tribunal of Campania, Decree, Session I, No. 01991/2019 del 18/12/2019.

²⁹ Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 del 07/01/2020.

³⁰ Regional Administrative Tribunal of Trento, Decision, Unique Sect., No. 00176/2023 del 07/11/2023.

³⁰ Council of State, Section VI, Decision, no. 1877 of 08/04/2003; Regional Administrative Tribunal of Sicilia-Catania, Decision, no. 1464 of 24/08/2002; Council of State, Section VI, Decision, no.2953 of 30/05/2001; Council of State, Section IV, Decision, no. 4808 of 12/09/2000; Council of State, Section V, Decision, no. 40 of 18/01/1980.

fulfil the public interest.³¹ It might be stated that the majority of judges would like a formal approach to the words of the invitation for bids because the theological interpretation would give them higher powers, which also means a higher benchmark of liability.

Focusing on the case of legal BIM, if the invitation for bids requires that "the previous experience in BIM shall be proven by attached documentation which highlights both the type and characteristics of the intervention and the authorship of the works. This documentation may consist of: excerpts of documents, certificates of validation or regular execution, assignment or assignment contracts (even between private individuals), etc...." It is clear that, to prove the previous experiences useful for assigning the score, are not sufficient the attestations or declarations coming exclusively from the bidder himself, but the documentation (project and contractual) needed to be objectively and immediately referable to the works, projects or interventions whose traceability to the experiences requested by the invitation letter was predicated" [authors' translations].³²

Since most judges will interpret the Public Administration's decision literally, the public procurement offers shall be precise without presenting irregularities. For instance, in public procurement, where BIM was part of it, the public administration correctly stated that the offer presented anomalous elements, which did not allow the offer's adequacy to be declared. The total annual costs established in the offer, in that particular case, 10.000 EUR, are meager for all the incorporated services (i.e., call centre, setting up of a technical IT desk, workforce, and the professional figures who use this equipment). Furthermore, "the annual incidence for personnel dedicated to management [must] be correctly calculated in terms of hours and costs, regardless of whether or not the structure employs them"³³ [authors' translations]. In simple words, labour costs, including the costs for BIM professionals, shall be realistic and include a calculation of hours and costs.

Although most judges will apply a literal interpretation, in a decision of the Regional Administrative Tribunal of Calabria,³⁴ it seems that the judges have applied a theological interpretation. After being excluded from the invitation for bids, the applicant filed a lawsuit because they disagreed with the public administration's reasoning. In that particular case, the invitation for bids included the possibility of presenting the offer traditionally or also with BIM. However, the platform could allow only 4 files. Thus, the participant sent a "Dropbox platform [that could] track and certify all activities on each individual file (uploads, modifications, deletions, views, etc.) via an integrated App

³¹ Regional Administrative Tribunal of Lombardia – Brescia, Decision, no. 123 of 30/01/2002.

³² *le esperienze pregresse in BIM dovranno essere comprovate da documentazione allegata che evidenzi sia la tipologia e le caratteristiche dell'intervento e sia la paternità dei lavori. Tale documentazione potrà essere costituita da: stralci di elaborati, certificati di validazione o di regolare esecuzione, contratti di affidamento o di incarico (anche tra privati), ecc...* Si evince che, al fine di comprovare le pregresse esperienze utili per l'assegnazione del punteggio, non erano sufficienti attestazioni o dichiarazioni provenienti esclusivamente dallo stesso offerente ma occorreva che la documentazione (progettuale e contrattuale) fosse oggettivamente e immediatamente riferibile ai lavori, progetti o interventi di cui si predicasse la riconducibilità alle esperienze richieste dalla lettera di invito. Council of State, Decision, Session V, No. 02078/2022 of 22/03/2022.

³³ *l'incidenza annuale per personale dedicato alla gestione [deve] essere correttamente computato in termini di ore e costi, indipendentemente che sia o meno in carico alla struttura*" Council of State, Decision, Session V, No. 04731/2023 del 10/05/2023. However, the same approach was taken also by Regional Administrative Tribunal of Lombardia, Sec. I, no. 01980/2022.

³⁴ Regional Administrative Tribunal of Calabria, Decision, Session Reggio Calabria, No. 00012/2024 del 03/01/2024.

managed by the Dropbox server itself"³⁵ [authors' translations]. Thus, changes after closing the invitation for bids would have been seen. Although the court agrees with this approach, the Court declares the decision non-proceedable since the application should have included in the object of the lawsuit not only the decision of exclusion but also the final document of the administrative proceeding.

Interpretation of public procurements and technical discretion of the public administration are strongly connected since interpretation is an instrument for achieving discretionary powers. However, in a few cases, judges distinguish between them. For instance, after not winning the invitation for bids, the plaintiff, the second-best bidder, filed a lawsuit since the plaintiff was the only one applying the BIM methodology,³⁶ while it received fewer points from the winning bid. However, the Court dismissed the case not because the evaluation of offers is part of the discretionary powers of the public administration but since the invitation for bids, the evaluation included "not only the design development according to BIM standards but also the clarity of presentation in the use of different software"³⁷ [authors' translations]. Thus, it is "not unreasonable that the commission may have considered this second parameter unsatisfactory, leading to an overall score lower than expectations"³⁸ [authors' translations]. In other words, the fact that the offer is the only one that includes BIM does not mean that this is the best offer since the invitation for bids included several parameters.

The role of the judicial administrative review can also deal with the evaluation of labour costs, the object of commercial activity, or the object of the public contract. For instance, while the plaintiff claimed that the labour costs of the winning offer were underestimated, the Court dismissed the case since the plaintiff should not have included all the labour costs – the labour costs in CAD and BIM, and part of the building was already done.³⁹ Additionally, the Court has underlined that the offer shall be evaluated as a whole and not by considering single parts of it.⁴⁰ Again, if the invitation for bids establishes that there is a new prize, when BIM is incorporated, only when the offer indicates a higher prize than the one established in the invitation for bids, then the bidder does not have a duty to inform for the "new" prize if the "new" prize is within the highest amount established in the public procurement.⁴¹ In addition, there is no need to have a "perfect overlap between what is described in the Chamber of Commerce certificate and the object of the procurement contract...[since]....the comparison must operate for the purpose of verifying the professional suitability of the participant, according to a non-

³⁵ *piattaforma dropbox traccia e certifica tutte le attività su ogni singolo file (upload, modifiche, eliminazioni, visualizzazioni, ecc.) tramite un'App integrata e gestita dal server dropbox medesimo*. Regional Administrative Tribunal of Calabria, Decision, Session Reggio Calabria, No. 00012/2024 del 03/01/2024.

³⁶ The term used in the legal decision is "methodology" (metodologia), while it should have been used BIM method (Veshi, Venditti and Picaro, 2023).

³⁷ *non era solo lo sviluppo progettuale secondo gli standard BIM ma anche la chiarezza espositiva nel ricorso ai diversi software*. Council of State, Decision, Session V, No. 09937/2023 del 20/11/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Toscana; Session I, no. 00977/2022.

³⁸ *non è irragionevole che la commissione possa avere ritenuto non soddisfacente tale secondo parametro conducendo ad un punteggio complessivo inferiore alle aspettative*. Council of State, Decision, Session V, No. 09937/2023 del 20/11/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Toscana; Session I, no. 00977/2022.

³⁹ Regional Administrative Tribunal of Lazio, Decision, Session II, No. 09178/2018 del 06/09/2018.

⁴⁰ Council of State, Decision, Session V, No. 07805/2019 of 13/11/2019. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Piemonte, Decision, No. 00059/2019 of 16/01/2019.

⁴¹ Council of State, Not-final Decision, Session V, No. 00048/2022 del 07/01/2022.

atomistic, but global evaluation of the performances deducted in the contract"⁴² [authors' translations]. Furthermore, the plaintiff did not prove the lack of it. In the concrete case, a company that offers assistance to entrepreneurship in advanced technologies with consultancy and services can also provide geometric, architectural, technological, and plant surveys to be returned in BIM. Moreover, the transcription in the business register has the nature of publicity for third parties, and its omission is not among the cases of mandatory exclusion from the tenders established in the Code of Public Contracts.⁴³ Moreover, in another case, where the plaintiff pretended that the winning bid got arbitrarily higher points, the Court dismissed the case since the object of the public contract was not only that the participants presented only the front masks but also to insert all the needed data.⁴⁴

Last but not least, the general rules of administrative law – such as the rules regarding subcontracting or contract assignment – will also be applied in the case of public procurements where BIM is used. For instance, while the plaintiff claimed that BIM was given to another company through subcontracting, resulting in the exclusion of the winning offer, the Court dismissed the case since subcontracting, within limits established by law, is allowed, although when the object of the subcontracting is the service of BIM.⁴⁵ According to the EU jurisprudence,⁴⁶ a temporary consortium of companies decides by itself how to divide and organise the work. So, the fact that the public contract has one main assignment and several accessory assessments and the leader company of the temporary consortium completes part, and not all, the main assignment is not a case of exclusion, especially if this is an invitation for bids to provide services. In simple words, it should be underlined that the public contract, although it establishes one assignment, can have several performances, including the BIM method.⁴⁷

To sum up, the judges' interpretation of the invitation of bids is mostly literal rather than theological, confirming the previous judicial approach. However, in one case, it can be stated that judges applied a theological approach.

4. LEGAL BIM AND CASE-LAW IN ITALY: BIM CERTIFICATE

BIM is a new construction method introduced for the first time with the MD no. 560 of 1st December 2017. As a result, there is a need for a certificate system that embodies the latest implementation of new technologies in the construction industry. The construction of a BIM certificate connects academia with the building industry (Liu, 2021). However, since BIM requires knowledge in natural science – i.e., civil engineering and/or architecture – a BIM Certificate is part of higher vocational education (Wu, Jiang

⁴² *non essendo peraltro richiesta una perfetta sovrapposibilità tra quanto descritto nel certificato camerale e l'oggetto del contratto d'appalto ...[perché]... il confronto operare in ragione della finalità di verifica dell'idoneità professionale della partecipante, secondo una valutazione non atomistica, ma globale delle prestazioni dedotte in contratto.* Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

⁴³ Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020; Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

⁴⁴ Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00930/2018 of 26/11/2018.

⁴⁵ Council of State, Decision, Session V, No. 02873/2023 del 21/03/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Calabria - Sezione staccata di Reggio Calabria n. 00878/2021).

⁴⁶ C-642/20.

⁴⁷ Regional Administrative Tribunal of Campania, Decision, Session I, No. 00319/2023 del 13/01/2023.

and Wang, 2023), which in the Italian legal system is generally incorporated in the master of first or second levels.

In simple words, as a new method of construction, new professionals have also been established. This is the case for the BIM Coordinator, BIM Manager, or BIM Modeler. Their role has also been underlined in financial terms. In more concrete terms, Article 2(5) annex⁴⁸ I.13 new Code of Public Contracts of April 2023 states that the determination of the amount to be based on public procurements, with contracts for which the adoption is mandatory of BIM methodology, shall apply a percentage increase of 10 percent on the total of calculation of the fees and before the application of the percentage relating to expenses and accessory charges, which are also calculated on the BIM percentage increase.

The new professionals in BIM are BIM Coordinators, BIM Managers, and BIM Modelers. Their job is mainly to work with other professionals and recognise different best practices within various approaches in different companies or projects (BIM Manager), or understand numerous sub-models, merge them, and create the integrated BIM (BIM Coordinator), or create and develop according to the concrete needs within many models, the best BIM model (BIM Modeler). According to the legal literature in BIM, the work of these new professionals is based on a relational approach with other professionals working on the construction project. Thus, this might justify a new approach to civil relations in the BIM contract (Veshi, Venditti, Picaro and Bashmili, 2023). However, it shall be underlined that currently, there is no register for BIM professionals. According to Article 1(1)(a) DPR 137/2012 (Decree of the President of the Republic No. 137 of 7th August 2012), professionals who are obliged to stipulate insurance contracts are those enrolled in different Orders after these Orders verify the specific professional requirements. Nevertheless, it shall be stated that in Italy, there are national registers for engineers, architects, and, recently, industrial designers, and – in general – these are also the professionals who work on BIM.

First of all, it shall be underlined that BIM requires new competences; thus, the results of the previous call for applications that are still valid cannot be used, even because the new call for applications was related to full-time positions while the previous call for applications was for a part-time position.⁴⁹ In addition, when an offer is presented, if the invitation for bids requires BIM, it must include the correct name of the BIM expert and a BIM file viewer program. Their absence is a case of exclusion from the invitation for bids.⁵⁰

The possession of a BIM certificate is fundamental. For instance, if the invitation for bids includes a need for a BIM certificate from the new professionals, there needs to be more than merely participation in the BIM course to qualify for the attribution of the extra points related to the BIM certificate. In other words, if the public administration is attributed to an expert points for mere participation in the course while the invitation for bids includes a need for a BIM certificate, acts of the public administration are considered

⁴⁸ In legal contexts, an annex to a code serves as a supplementary document designed to complement the main legislative text. It provides specific technical details, tables, diagrams, or regulations that enhance the understanding, application, or specification of the code's provisions. This approach ensures that the main text remains concise and accessible while allowing for detailed elaboration where necessary. For instance, Annex I.13 of the Code of Public Contracts of April 2023 serves to elucidate the parameters for design, particularly in scenarios involving the application of BIM.

⁴⁹ Regional Administrative Tribunal of Campania, Ordinance, Session V, No. 00806/2019 of 22/05/2019.

⁵⁰ Council of State, Decision, Session V, No. 08173/2023 del 05/09/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Lazio, Session Quarta-bis, 23/12/2022, no. 17487).

void.⁵¹ Again, if the sole responsible for the procedure of the public administration requests the certificates, as established in the invitation for bids, the lack of response is a case of exclusion from the public procurement.⁵² Moreover, the absence of proof of experience in BIM, according to the rules of the invitation for bids, is a case of not winning the invitation for bids.⁵³ However, it shall be clarified that the certificate shall be held by the company that will do the concrete job and not by the parent company that has presented the offer.⁵⁴ Additionally, there is a difference between the BIM certificate that shall be possessed by BIM experts and other certifications that the contractor shall possess.⁵⁵ Moreover, attributing the points related to the BIM experience is part of the Public Administration's technical discretion. For instance, after not winning the invitation for bids, the applicant, the second-best bidder, filed a lawsuit since the Public Administration had assigned higher points to the winning bid, which presented a BIM Manager with only three previous experiences in the planning phase and not on the implementation phase, while the second-best bidder included a BIM Manager with more experience, also in the implementation phase. However, the Court dismissed the case since this is part of the Public Administration's technical discretion.⁵⁶

The contractual relationship of the BIM professional with the participant in public procurement shall be clarified. For instance, if the invitation for bids includes a need for a presence in the working group of at least one young technician registered in the relevant professional register for less than five years, also a professional who includes in their CV the notion of collaborator,⁵⁷ is included in this notion.⁵⁸ Again, the case is dismissed if the plaintiff claims that the BIM work was not done by an employee but by an expert with a continuous contractual relationship,⁵⁹ if BIM is an accessory part of the public contract.⁶⁰

Sometimes, the interpretation of public procurement can also deal with the professionals who work with BIM⁶¹ or with the possibility of having more than one manager for the project.⁶² After not winning the invitation for bids, the plaintiff, the second-best bidder, filed a lawsuit since the winner's offer did not indicate the professional who would have been responsible for BIM and his/her certificates as well as the offer did not have an existing "Project Management" structure, which would have been established only later, in the event of an assignment of the service. Thus, according to the plaintiff, the offer is indeterminate and conditional, and it should have been excluded. However, the Court dismissed the case since it agreed with the Public Administration. In other words, "In case of assignment of the service" is intended exclusively to anticipate, at the time of the presentation of the offer, the content of the service to be (eventually) performed, nor can the reference to an uncertain and non-existing structure at the time

⁵¹ Regional Administrative Tribunal of Campania, Decision, Session VIII, No. 05468/2023 of 09/10/2023.

⁵² Regional Administrative Tribunal of Piemonte, Decision, Session I, No. 00074/2021 of 22/01/2021.

⁵³ Council of State, Decision, Session V, No. 02078/2022 of 22/03/2022. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Sardegna, Decision, Session I, 7 dicembre 2020, n. 683.

⁵⁴ Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

⁵⁵ Regional Administrative Tribunal of Lombardia, Decision, Session I, No. 01932/2019 of 28/08/2019.

⁵⁶ Council of State, Decision, Session V, No. 07908/2020 of 10/12/2020. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 of 07/01/2020.

⁵⁷ The correct notion in Italian is "collaboratore".

⁵⁸ Regional Administrative Tribunal of Sardegna, Decision, Session II, No. 00027/2021 del 19/01/2021.

⁵⁹ The correct notion in Italian is "contratto continuativo di cooperazione".

⁶⁰ Regional Administrative Tribunal of Lazio, Decision, Session Seconda Ter, No. 06281/2023 del 11/04/2023.

⁶¹ Regional Administrative Tribunal of Salerno, Session I, no. n. 01562/2023.

⁶² Regional Administrative Tribunal of Lazio, Decision, Session Seconda Ter, No. 10474/2020 del 14/10/2020.

of the offer be considered as accurate"⁶³ [authors' translations]. The same would have been stated in the case of BIM, since the offer indicated that regarding the preliminary cognitive activities of the intervention, a three-dimensional BIM model for the punctual elements would be presented. In other words, in an offer that includes BIM, it is also possible to include future working methods, i.e., establishing a structure for project management. Moreover, if the invitation for bids does not include the indication of BIM professionals and a BIM certificate, the offer can also establish general indications for them without being considered a conditional, uncertain, or indeterminate offer.

Eventually, because BIM projects might be complex, having more than one manager in public procurement where BIM is involved is possible. For instance, in a case, after not winning the invitation for bids, the plaintiff, the second-best bidder with the same points as the winning bid, filed a lawsuit because the winning offer included a manager who does not possess a diploma in civil or construction engineering, as the invitation for bids established, but in environmental and territorial engineering. However, the Court dismissed the case since the winning offer included a manager with an environmental and territorial engineering diploma and two co-managers with civil or construction engineering diplomas, as the invitation for bids was established. During the administrative investigation, the manager changed, within the same team of three managers. While the plaintiff considered this a change in the team's composition, which should have led to decreased points, this does not modify the team's composition for the public administration and the Court.⁶⁴

To sum up, a BIM certificate is a fundamental requirement for participation in public procurements where BIM is included. Quite interestingly, the forms of collaboration between the BIM professional and the participant in the public bid are quite flexible.

5. CONCLUSIONS

This research reviewed legal BIM from an Italian judicial perspective. The Italian case was chosen because, starting January 2025, the Code of Public Contracts of 2023 requires BIM for all public tenders over 1 million EUR.

At the EU level, BIM was incentivised by Article 22(4) Dir. 2014/24/EU. In Italian national legislation, for the first time in Italian legal history, BIM was introduced with MD no. 560 of 1st December 2017. While the MD 560/2017 was considered unlawful by the Council of State in an incidental proceeding⁶⁵ and was modified with MD 312/2021, Article 43 Code of Public Contracts of April 2023 has introduced BIM with a primary source. Although legal BIM is a relatively new discipline, Italian judges, mostly within the public procurements, have discussed several aspects of BIM.

This research analysed 54 legal decisions over a five-year timeline, with a mandatory minimum review period of BIM introduction of three years. Notably, Article 6(1)(a) of MD 560/2017 required the mandatory use of BIM for all public tenders exceeding €100 million – a relatively high threshold. However, this threshold has progressively decreased on an annual basis. Additionally, MD 312/2021 marked a shift in Italy's approach to BIM, transitioning from a mandatory ("shall") to a permissive ("could")

⁶³ *In caso di affidamento del servizio" vuol esclusivamente anticipare, al tempo della presentazione dell'offerta, il contenuto della prestazione da (eventualmente) eseguire, né tanto meno può ritenersi centrato il riferimento a una struttura incerta e non esistente al tempo dell'offerta...* Council of State, Decision, Session V, No. N. 10640/2023 del 11/12/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Salerno; Session I, no. n. 01562/2023.

⁶⁴ Regional Administrative Tribunal of Lazio, Decision, Session Seconda Ter, No. 10474/2020 del 14/10/2020.

⁶⁵ Council of State, Opinion, No. 01349/2019 of 18/04/2019.

framework for its use. The research focused exclusively on case law available up to January 2024.

Of the 54 legal cases reviewed, 43 disputes involved public procurements utilizing BIM, with 11 cases currently under appeal. Since Italy ranks as the world's 9th largest economy (Italian Trade Agency, 2024), this number of disputes does not appear excessively high. This is particularly noteworthy given the increasing use of technology and mechanisms like dispute boards—a multidisciplinary team overseeing procurement phases, execution, and technical testing—and dispute avoidance strategies—such as alternative dispute resolution, which cannot be mandated under Italian law⁶⁶—they play a significant role in mitigating claims (Carleo, 2019).

Moreover, BIM itself represents a transformative methodology in the construction industry, aiming to minimise errors from the design phase through to execution (Veshi, Venditti, Picaro and Bashmili, 2024; Veshi, Venditti and Picaro, 2023). Consequently, BIM emerges as a potential game-changer for the industry, offering a paradigm shift toward enhanced efficiency and accuracy.

This research divided the intervention of the Italian judges into three aspects: 1. discretionary powers of the public administration; 2. judicial interpretation of the invitation of bids; and 3. BIM Certificate. Regarding the discretionary powers of the public administration, if the invitation for bids does not include BIM as a mandatory requirement, the plaintiff shall prove that in that concrete public procurement, the application of BIM, rather than CAD, had several advantages.⁶⁷ In addition, discretionary powers are part of the public procurements where BIM is used as a construction method also when the public administration chooses the best offer⁶⁸ or the parameters of the technical capacity,⁶⁹ within the limits of excess power due to the abnormality of the technical choices⁷⁰ or gross error of fact, manifest illogicality, or unreasonableness.⁷¹ However, discretionary powers do not mean the absence of the principle of transparency: if the invitation for bids states that the points are attributed through tender specifications, that shall be done;⁷² otherwise, there is no need for their fragmentation.⁷³ Moreover, sometimes, the Court dismisses a case since even if the Public Administration had awarded the plaintiff the points related to BIM, still the ranking would not change, and the second-best bidder would not win the public procurement.⁷⁴ Last but not least, it shall be mentioned that the general proceeding rules of territorial competence,⁷⁵ termination of the lawsuit,⁷⁶ preventive measures,⁷⁷ and bureaucratic problems⁷⁸ are applied as well as

⁶⁶ Italian Constitutional Court, 6 Dicembre 2012, Decision No. 272.

⁶⁷ Council of State, Decision, Session V, No. 02276/2019 del 08/04/2019; and Regional Administrative Tribunal of Marche, Decision, Session I, No. 00398/2018 of 30/05/2018.

⁶⁸ Regional Administrative Tribunal of Toscana, Decision, Session I, No. 00977/2022 of 02/08/2022.

⁶⁹ Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00452/2017 del 30/05/2017.

⁷⁰ Council of State, Decision, Session V, No. 02276/2019 of 08/04/2019.

⁷¹ Regional Administrative Tribunal of Toscana, Decision, Session I, No. 01438/2019 25/10/2019.

⁷² Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00640/2018 of 23/07/2018.

⁷³ Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00564/2021 del 21/06/2021.

⁷⁴ Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 del 07/01/2020. Regional Administrative Tribunal of Lazio, Decision, Session II, No. 09178/2018 del 06/09/2018. Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

⁷⁵ Regional Administrative Tribunal of Campania, Ordinance, Session II, No. 01144/2020 of 15/09/2020.

Regional Administrative Tribunal of Campania, Ordinance, Session I, No. 03249/2020 of 22/07/2020.

⁷⁶ Regional Administrative Tribunal of Campania, Decision, Session I, No. 03779/2021 of 07/06/2021.

⁷⁷ Regional Administrative Tribunal of Campania, Decree, Session I, No. 01991/2019 del 18/12/2019.

⁷⁸ Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 del 07/01/2020.

for the application of the principle of secrecy of offers and protection of competition⁷⁹ also when the public procurements include BIM as a construction method.

Focusing on the case of the judicial interpretation of the invitation of bids, the interpretation given by the judges to the invitation of bids is mostly literal rather than theological by confirming the previous judicial approach. The legal decision regarding public procurements also using BIM dealt with several aspects, such as elements of proof of the professionals working in BIM,⁸⁰ the object of the commercial activity,⁸¹ clarity of the offer,⁸² evaluation of the labour costs,⁸³ the possibility to use future working methods⁸⁴ or the clarity of the object of the public contract.⁸⁵

Regarding the BIM certificate, BIM requires new knowledge, which differs from the previous knowledge part of a public exam, the ranking of which is still valid.⁸⁶ In addition, if the invitation for bids includes BIM experts who shall be identified, the absence of the correct name of the BIM professional is a cause of exclusion.⁸⁷ But, if the invitation for bids does not include the indication of BIM professionals and a BIM certificate, the offer can also establish general indications for them without being considered a conditional, uncertain, or indeterminate offer.⁸⁸ Moreover, possessing a BIM certificate is fundamental: the mere participation in the course is different from BIM certificate⁸⁹ and the absence of proof of BIM certificate⁹⁰ or BIM experience⁹¹ are cases of exclusion or of not winning the public procurement. However, although attributing the points related to the BIM experience is part of the Public Administration's technical discretion,⁹² the BIM certificate and other certifications that the contractor shall possess are the same.⁹³ Furthermore, the contractual relationship of the BIM professional with the participant in public procurement is quite flexible since it can also be a collaborator⁹⁴ or a continuous

⁷⁹ Regional Administrative Tribunal of Trento, Decision, Unique Sect., No. 00176/2023 del 07/11/2023.

⁸⁰ Council of State, Decision, Session V, No. 02078/2022 of 22/03/2022. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Sardegna, Sec. I, no. 683 of 7/12/2020.

⁸¹ Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

⁸² Council of State, Decision, Session V, No. 04731/2023 del 10/05/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Lombardia, Sec. I, no. 01980/2022).

⁸³ Regional Administrative Tribunal of Lazio, Decision, Session II, No. 09178/2018 del 06/09/2018. Council of State, Decision, Session V, No. 07805/2019 of 13/11/2019. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Piemonte, Decision, No. 00059/2019 of 16/01/2019.

⁸⁴ Council of State, Decision, Session V, No. N. 10640/2023 del 11/12/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Salerno; Session I, no. n. 01562/2023.

⁸⁵ Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00930/2018 of 26/11/2018.

⁸⁶ Regional Administrative Tribunal of Campania, Ordinance, Session V, No. 00806/2019 of 22/05/2019.

⁸⁷ Council of State, Decision, Session V, No. 08173/2023 del 05/09/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Lazio, Session Quarta-bis, 23/12/2022, no. 17487.

⁸⁸ Council of State, Decision, Session V, No. N. 10640/2023 del 11/12/2023 (appeal: Regional Administrative Tribunal of Salerno; Session I, no. n. 01562/2023).

⁸⁹ Regional Administrative Tribunal of Campania, Decision, Session VIII, No. 05468/2023 of 09/10/2023.

⁹⁰ Regional Administrative Tribunal of Piemonte, Decision, Session I, No. 00074/2021 of 22/01/2021.

⁹¹ Council of State, Decision, Session V, No. 02078/2022 of 22/03/2022. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Sardegna, Decision, Session I, 7 dicembre 2020, n. 683.

⁹² Council of State, Decision, Session V, No. 07908/2020 of 10/12/2020. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 of 07/01/2020.

⁹³ Regional Administrative Tribunal of Lombardia, Decision, Session I, No. 01932/2019 of 28/08/2019.

⁹⁴ Regional Administrative Tribunal of Sardegna, Decision, Session II, No. 00027/2021 del 19/01/2021.

contractual relationship⁹⁵ as well as it is given the possibility to have more than one manager⁹⁶ or to establish only general indications for the BIM responsible, if the invitation for bids does not require their exact indication at the moment of the offer.⁹⁷

To sum up, legal BIM might be used in administrative law, i.e., as part of the public procurements, as well as in civil law, i.e., contractual relations between parties. However, these two branches of law are connected. For instance, Article 12(1)(b) Code of Public Contracts states that the rules of the civil code will be applied to the stipulation of the contract and the execution phase. While there are no legal cases in the ordinary jurisdiction, several cases – 54 legal decisions plus the opinion of the Council of State related to MD 560/2017 – were found in the administrative law, mainly dealing with public procurements. Applying new technologies in the construction industry might result in a new legal approach. This is the case of legal BIM and civil law (Veshi, Venditti and Picaro, 2023). On the contrary, the examination of the Italian administrative jurisprudence on legal BIM showed that judges still apply the traditional rules on public procurements. Two clear examples could be given from the administrative jurisdiction. For instance, in its decision No. 00564/2021 of 21/06/2021, the Regional Administrative Tribunal of Liguria recalled several decisions of the Council of State.⁹⁸ The same can also be stated for the highest administrative court, the Council of State, in its decision, No. 02276/2019 of 08/4/2019, recalling a previous decision of itself.⁹⁹

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⁹⁵ Regional Administrative Tribunal of Lazio, Decision, Session Seconda Ter, No. 06281/2023 del 11/04/2023.

⁹⁶ Regional Administrative Tribunal of Lazio, Decision, Session Seconda Ter, No. 10474/2020 del 14/10/2020.

⁹⁷ Council of State, Decision, Session V, No. N. 10640/2023 del 11/12/2023. The same approach was stated also in the decision of the first instance: Regional Administrative Tribunal of Salerno; Session I, no. n. 01562/2023.

⁹⁸ Among others, i.e. Council of State, Session V, Decision, no. 2437 of 22.3.2021; Council of State, Session III, Decision, no. 2168 of 15.3.2021; Council of State, Session V, Decision, no. 5215 of 26.8.2020

⁹⁹ Council of State, Session V, no. 5655 of 11/12/2015.

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Annex: Decisions Analysed

Council of State

- Council of State, Decision, Session III, No. 06058/2019 of 02/09/2019.
- Council of State, Decision, Session V, No. 02078/2022 of 22/03/2022 (appeal: Regional Administrative Tribunal of Sardegna, Session I, no. 683 of 7/12/2020).
- Council of State, Decision, Session V, No. 02276/2019 del 08/04/2019 (appeal: Regional Administrative Tribunal of Marche, Decision, Sez. I, n. 398/2018).

- Council of State, Decision, Session V, No. 02873/2023 del 21/03/2023 (appeal: Regional Administrative Tribunal of Calabria-Sezione staccata di Reggio Calabria n. 00878/2021).
- Council of State, Decision, Session V, No. 04731/2023 del 10/05/2023 (appeal: Regional Administrative Tribunal of Lombardia, Session I, no. 01980/2022).
- Council of State, Decision, Session V, No. 07805/2019 of 13/11/2019 (appeal of Regional Administrative Tribunal of Piemonte, Decision, No. 00059/2019 of 16/01/2019) .
- Council of State, Decision, Session V, No. 07908/2020 of 10/12/2020 (appeal of Regional Administrative Tribunal of Friuli Venezia Giulia, Decision, Session I, No. 00008/2020 of 07/01/2020) .
- Council of State, Decision, Session V, No. 08173/2023 del 05/09/2023 (appeal: Regional Administrative Tribunal of Lazio, Session Quarta-bis, 23/12/2022, no. 17487).
- Council of State, Decision, Session V, No. 09937/2023 del 20/11/2023 (appeal: Regional Administrative Tribunal of Toscana; Session I, no. 00977/2022).
- Council of State, Decision, Session V, No. N. 10640/2023 del 11/12/2023 (appeal: Regional Administrative Tribunal of Salerno; Session I, no. n. 01562/2023).
- Council of State, Not-final Decision, Session V, No. 00048/2022 del 07/01/2022 (appeal: Regional Administrative Tribunal of Campania, Decision, Sez. I, n. omis).
- Council of State, Opinion, No. 01349/2019 of 18/04/2019.

Regional Administrative Tribunal of Basilicata

- Regional Administrative Tribunal of Basilicata, Decision, Session I, No 00598/2020 of 28/09/2020.

Regional Administrative Tribunal of Calabria

- Regional Administrative Tribunal of Calabria, Decision, Session Reggio Calabria, No. 00878/2021.
- Regional Administrative Tribunal of Calabria, Decision, Session Reggio Calabria, No. 00012/2024 del 03/01/2024.

Regional Administrative Tribunal of Campania

- Regional Administrative Tribunal of Campania, Decision, Session I, No. 00319/2023 del 13/01/2023.
- Regional Administrative Tribunal of Campania, Decision, Session I, No. 03249/2020 of 22/07/2020 (same case with Regional Administrative Tribunal of Campania, Ordinance, Session II, No. 01144/2020 of 15/09/2020) .
- Regional Administrative Tribunal of Campania, Decision, Session I, No. 03779/2021 of 07/06/2021.
- Regional Administrative Tribunal of Campania, Decision, Session VIII, No. 05468/2023 of 09/10/2023.
- Regional Administrative Tribunal of Campania, Decision, Session I, n. omis.
- Regional Administrative Tribunal of Campania, Decree, Session I, No. 01991/2019 del 18/12/2019.
- Regional Administrative Tribunal of Campania, Ordinance, Session V, No. 00806/2019 of 22/05/2019.
- Regional Administrative Tribunal of Campania, Ordinance, Session II, No. 01144/2020 of 15/09/2020 (same case with Regional Administrative Tribunal of Campania, Decision, Session I, No. 03249/2020 of 22/07/2020).

Regional Administrative Tribunal of Campania, Session of Salerno; Session I, no. n. 01562/2023 (appeal: Council of State, Decision, Session V, No. N. 10640/2023 del 11/12/2023).

Regional Administrative Tribunal of Emilia Romagna

Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00117/2020 del 06/02/2020.

Regional Administrative Tribunal of Emilia Romagna, Decision, Session II, No. 00452/2017 del 30/05/2017.

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Regional Administrative Tribunal of Lazio

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Regional Administrative Tribunal of Lazio, Decision, Session IV, No. 17947/2022 of 30/12/2022.

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Regional Administrative Tribunal of Lazio, Decision, Session Seconda Ter, No. 06281/2023 del 11/04/2023.

Regional Administrative Tribunal of Lazio, Session Quarta-bis, 23/12/2022, no. 17487.

Regional Administrative Tribunal of Liguria

Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00564/2021 del 21/06/2021.

Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00930/2018 of 26/11/2018.

Regional Administrative Tribunal of Liguria, Decision, Session I, No. 00640/2018 of 23/07/2018.

Regional Administrative Tribunal of Lombardia

Regional Administrative Tribunal of Lombardia, Decision, Session I, No. 01932/2019 of 28/08/2019.

Regional Administrative Tribunal of Lombardia, Decision, Session I, No. 01210/2017 of 29/05/2017.

Regional Administrative Tribunal of Lombardia, Session I, no. 01980/2022 (Council of State, Decision, Session V, No. 04731/2023 del 10/05/2023) .

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Regional Administrative Tribunal of Piemonte

Regional Administrative Tribunal of Piemonte, Decision, No. 00059/2019 of 16/01/2019

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Regional Administrative Tribunal of Puglia

Regional Administrative Tribunal of Puglia, Decision, Session II, No. 00106/2022 del 20/01/2022.

Regional Administrative Tribunal of Sardegna

Regional Administrative Tribunal of Sardegna, Decision, Session II, No. 00027/2021 del 19/01/2021.

Regional Administrative Tribunal of Sardegna, Session I, no. 683 of 7/12/2020 (appeal: Council of State, Decision, Session V, No. 02078/2022 of 22/03/2022).

Regional Administrative Tribunal of Sicilia

Regional Administrative Tribunal of Sicilia, Decision, Session II, No. 00529/2023 of 16/02/2023.

Regional Administrative Tribunal of Toscana

Regional Administrative Tribunal of Toscana, Decision, Session I, No. 01438/2019 25/10/2019.

Regional Administrative Tribunal of Toscana, Decision, Session I, no. 00977/2022 of 02/08/2022 (Council of State, Decision, Session V, No. 09937/2023 del 20/11/2023).

Regional Administrative Tribunal of Trento

Regional Administrative Tribunal of Trento, Decision, Unique Sect., No. 00176/2023 del 07/11/2023.

Regional Administrative Tribunal of Veneto

Regional Administrative Tribunal of Veneto, Decision, Session III, No. 01709/2022 of 07/11/2022.

