Statutory dispute resolution. The british perspective
RICHARD BAILEY

International construction law as a ‘Private Legal System’: Emerging from the ‘primordial soup’ in the search for coherence
MATTHEW BELL

Smart contracts and possible applications to the construction industry
HELDER CARDEIRA
New Perspectives in Construction Law

Bucharest Academy of Economic Studies, Department of Law
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Friday, September 16
Saturday, September 17

June 2
Empoyer’s Requirements - Clauses in FIDIC (Yellow Book) and source of disputes in public procurement of works procedures.
Venue: Academy of Economic Studies

July 7
Pros and cons regarding the proposal of a Romanian Construction Code
Venue: Technical University of Civil Engineering of Bucharest

November 4
FIDIC Contracts v. National Administrative Construction Contracts
Venue: Romanian American University

December 8
Arbitration & Alternative dispute resolution (ADR)
Venue: University of Bucharest

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Editorial

Ovidiu Ioan DUMITRU
President
Romanian Society of Construction Law

The Romanian Society of Construction Law aims to support the construction sector by elaborating juridical and technical opinions regarding both the legislation and the practice, by promoting and developing the related fields and, not least, by maintaining strong links with individuals, companies and institutions from Romania or abroad, which are active in the construction area.

Noticing the lack of a unitary legislation and the continuous state of litigation in construction, we have gathered a group of legal practitioners, engineers, architects, consultants and academics and we are trying, together, to provide solutions to the Romanian construction market by elaborating and promoting studies, legislative opinions and scientific papers. The Romanian Society is a member of the European network of associations specialized in construction law, the European Society of Construction Law (www.escl.org) and of the International Society of Construction Law (www.sclinternational.org), reporting every year at both European and International annual conferences the evolution of this law in Romania and involving the high representatives of the above indicated organizations in our activities and doing so we were empowered to organize in 2018 the European Annual Conference in Romania.

Among the RSCL’s activities we can enumerate: supporting specialized arbitration in construction, helping the improve of consultancy, editing specialized periodical publications, organizing preparation courses, seminars, conferences and public debates, initiating, promoting and developing any actions that may support the above field. RSCL develops its own programs and partnerships with public authorities and private entities from Romania and abroad.

We are open to any new collaboration that may help us improve our activity and by that develop the field, so we invite all experts in construction law and any other interested person or public/private entity to join the Romanian Society of Construction Law’s activity.
New Perspectives in Construction Law

The papers in the current number of the Romanian Construction Law Review were selected by the Scientific Committee from the ones presented at our first International Scientific Conference. During the two days of conference, there were hosted debates and workshops on topics of general interest to the construction market, both Romanian and international, as well as peculiarities of the Contract, the implementation of FIDIC contracts and arbitration in construction.

RSCL Conference „New Perspective in Construction Law” was opened by representatives of leading professional organizations in the fields of law and construction of the academic, along with Romanian officials. During this session had intervention Ovidiu Ioan Dumitru – President of RSCL, Vlad Dumitru – Deputy General Secretary of Chamber of Commerce and Industry of Romania, Anca Ginavar – General Director from Ministry of Regional Development and Public Administration, Viorel Roș – President of the Court of International Commercial Arbitration, Laurențiu Plosceanu – President of ARACO, Claudiu Georgescu – President of APMCR.

Also, representatives of the most important organization in the world have shared their experience in sectors such as arbitration, dispute resolution using adjudication procedure, developing a new division of responsibility in the construction field or development of international law construction. The list of international speakers have included:

Virginie Colaiuta – Co-Chair on the IBA Dispute Resolution Subcommittee
Monika Chao-Duivis – General Secretary of the European Society of Construction Law and professor at the Faculty of Construction Law of the Delft University, in The Netherlands
Richard Bailey – Chairman of the Society of Construction Law UK
Mathew Bell – President of Academic Subcommittee of Society of Construction Law Australia

The second day was reserved for working sessions where experts from the private sector had the opportunity to talk with foreign guests two issues in the public interest at this time in Romania, the application of FIDIC contracts in our country and adapting the European legislation in the field of quality building materials.

The debate focused on the main issues in construction: disparate legal system in the field, leaving room for interpretation; lack of correlation between conditions of FIDIC contracts with national legislation; elimination of Commissions adjudication of disputes from contracts implemented in Romania, provided the original FIDIC contracts; lack of professionals in state institutions; the strong influence of politics on public procurement, lack of clear measures that provide protection and safety of workers in the field, weak regulations of control institutions in construction sector; flawed environmental legislation in relation to construction activity.
STATUTORY DISPUTE RESOLUTION. THE BRITISH PERSPECTIVE
RICHARD BAILEY

This is a paper given to the Romanian Society of Construction Law at their inaugural conference from 19 to 21 March 2015. The purpose of this paper is to introduce the participants at the conference to statutory dispute resolution in the United Kingdom. Statutory adjudication, which was introduced by the Housing Grants, Construction and Regeneration Act 1996 and came into force for all construction contracts in the United Kingdom entered into after 1 May 1998 has been a highly successful method of resolving disputes in the construction industry. The author is someone who has been heavily involved in adjudication. This paper introduces the delegates to adjudication and strongly recommends that they give consideration to it as a way and means of resolving disputes in the construction industry quickly. He also looks briefly at dispute boards and how in the UK dispute boards can be compatible with the requirements of the Housing Grants, Construction and Regeneration Act 1996 (as recently amended in 2011).

INTERNATIONAL CONSTRUCTION LAW AS A ‘PRIVATE LEGAL SYSTEM’: EMERGING FROM THE ‘PRIMORDIAL SOUP’ IN THE SEARCH FOR COHERENCE
MATTHEW BELL

The legal issues involved in the construction and use of the built environment are complex, diverse and of fundamental importance to commerce and society around the world. However, legislative and judicial inroads into construction activity remain susceptible to parochial concerns, resulting in legal regulation tending to run counter to the desire of international commerce for certainty and coherence. In turn, the construction law community displays a preference for legal mechanisms which, to the extent possible, transcend local regulation, such as standard forms of contract and international arbitration. This paper argues that the apparent conflict between construction law regulation and the community’s preferences can at least partially be explained by reference to scholarship on ‘Private Legal Systems’ (PLSs) which has been undertaken in relation to other transnational commercial endeavours. It suggests, therefore, that applying a PLS-based analysis to international construction may assist in promoting greater coherence in this vital point of interface between commerce and the law.

PROBLEMS OCCURRED IN THE APPLICATION OF FIDIC-TYPE CONTRACTUAL PROVISIONS IN ROAD TRANSPORT INFRASTRUCTURE WORKS - ROADS AND RAILWAYS
MIHAI DICU

A uniformed labor market and globalization as a world-wide effect imply the knowledge of regulations with common characteristics for the concerned parameters. In this regard, adopting the control conditions of the execution at a common denominator, known and respected by all participants in the system, becomes obligatory in their adoption at the decisional level.
SMART CONTRACTS AND POSSIBLE APPLICATIONS TO THE CONSTRUCTION INDUSTRY
HELDER CARDEIRA

A recent inquiry into Construction Industry Insolvency in NSW, commissioned by the NSW Government in light of a number of mid-tier builder insolvencies in 2012 and the knock-on effect on subcontractors, highlighted the timing and guarantee of payments to be at the heart of the problem. As a result of the inquiry, the NSW Government made alterations to the NSW Construction Industry Security of Payment Act, but no measures could be implemented to guarantee the financial security of a contract. This paper suggests that smart contracts together with cryptocurrencies can provide the construction industry with an efficient method to expedite payments between principal and head contractor, and subcontractors, and provide protection against insolvencies.

COMPARATIVE VIEW OF RISKS’ ALLOCATION IN A FIDIC CONTRACT [RED BOOK] AND THE ROMANIAN CONSTRUCTION AGREEMENT
ALICE MARIANA APETREI

An important aspect when deciding on a form of contract is the allocation of risks between the parties. It is said that a risk should be assumed by the party best able to know about it and to take action for limiting its consequences. FIDIC contracts catch this idea by clearly stipulating the circumstances that engage the liability of each party. Under the Romanian construction contract, the absence of a professional support (an engineer to act for the employer) triggers higher responsibility on the contractor. If the contractor considers that damage is imminent due to employer, he may even terminate the contract, as compare to FIDIC provisions that offer remedies for keeping the contract alive. A proper allocation of risks has great impact on both, the contract management and the works.

STATUTE OF LIMITATION IN FIDIC CONTRACTS CONCLUDED IN THE PUBLIC PROCUREMENT PROCEDURES
ZAIRA ANDRA BAMBERGER

The controversy as to the legal nature of a contract concluded under the public procurement procedures (i.e. civil/commercial contract or administrative) considering different and contradictory court decisions where this matter is treated differently it is important from a practical point of view (practical consequences). A deep analysis considering both the applicable law on public procurement, as well as the general provisions of the civil law provisions may give to the practitioners some arguments that such contracts cannot be excluded from the application of the civil law regulations, even if the administrative courts are competent to decide on the performance or modification of such contracts. In our opinion considering the practice and doctrine related to FIDIC contracts the statute of limitation should be governed by the civil law and not by the specific provisions of the law no 554/2004 on the administrative litigation.
VARIATION OF WORKS IN CONTRACTS AWARDED THROUGH PUBLIC PROCUREMENT OF WORKS PROCEDURES. REGULATION AND CONSEQUENCES
MARIUS BÂRLĂDEANU, IRINA MITROFAN

After contemplating the Romanian legal framework applicable to construction works, as well as to public procurement of works, this article will expand on the relevant rules and arguments used to support the necessity for a new public procurement procedure to contract any additional works or quantities of items of work required by a variation of already contracted works. Thus, considerations on the notion of substantial variation of contract, as well as relevant decisions of competent courts of law in Romania will be presented to substantiate the authors’ conclusions and recommendations on appropriate protection contractors may consider upon negotiating the terms of a contract awarded through public procurement of works procedure under the Romanian law.

DISPUTE RESOLUTION IN CONSTRUCTION CONTRACTUAL RELATIONS
TIGRAN KHACHATRYAN

In recent years one of the most important issues to be considered in drafting any contract, including a construction contract, is the method of future dispute resolution. Although many contracts may remain silent on the issue of future dispute resolution, costs in time, money and destroyed business relationships which can be raised when disputes are resolved through traditional litigation have meant that more and more contracts now include provisions providing for or mandating dispute resolution through so-called dispute resolution. The problematic issue refers to any type of dispute resolution which does not involve a solution through litigation in a court and it may involve, either alone or in combination, arbitration, mediation, negotiation and counseling. This paper provides an introduction to the dispute resolution techniques that are frequently encountered in the construction industry. The focus is on the domestic market, but international dispute adjudication boards are also considered.

CAN MACHINES REPLACE THE HUMAN BRAIN?
A REVIEW OF LITIGATION OUTCOME PREDICTION METHODS FOR CONSTRUCTION DISPUTES
AHMAD ALOZN, ABDULLA GALADARI

Several litigation outcome prediction approaches are reviewed in the construction disputes area. The reviewed approaches include artificial neuronal networks, boosted decision trees, particle swarm optimization, split-step particle swarm optimization, case based reasoning and integrated prediction model. The integrated prediction model outweighs the rest of the approaches, achieving a prediction rate of 91% using 132 training litigation cases only. Although there are over 45 attributes that might affect a construction litigation case, it is observed that 10 to 15 attributes would be sufficient to predict the outcome of litigation in the area of construction disputes. It is found that the most important attributes are type of contract, type of parties involved in the dispute, directed employer changes and liquidated damages.
CURRENT ISSUES IN CONSTRUCTION LAW IN THE SLOVAK REPUBLIC WITH PARTICULAR EMPHASIS ON PRESENT AND FUTURE PRICE CALCULATIONS AND BUDGETS IN PROPERTY DEVELOPMENT AND OTHER CONSTRUCTION PROJECTS
MOJMÍR MAMOJKA JR.

This paper provides an analysis of selected provisions governing the concept of Contract for Work, which in the Slovak body of laws is regulated in the Commercial Code (Act No. 513/1991 Coll.). The author of the paper provides an interpretation of present-day issues regarding pricing and pricing budgets, particularly vis-à-vis construction projects in which the state is the contract giver (e.g. financial expenditures incurred in the extensive reconstruction of an ice-hockey arena in Bratislava with the aim of hosting the IIHF Ice-hockey World Championship in 2011) and, at the same time, an interpretation of a relatively complicated additional calculation of final expenditures that often become the subject of, inter alia, public and political discussions. For the purposes of the paper, the author will make use of experience that he has garnered both as a member of the Bar and a university lecturer. Seeking to ensure a concise coverage of the selected issues, the author will use primarily interpretative methods of analysis, synthesis and comparison.

RELATIONS BETWEEN INTERNAL MARKET FREEDOMS AND FUNDAMENTAL RIGHTS IN THE ASPECT OF GLOBALIZING WORLD AND CONSTRUCTION LAW
GAYANE MARUKYAN

There are number of technology developments that clearly have their direct reflection and affect on the construction industry. It is almost trite to note that the world economy is becoming globalized and that this is affecting the construction industry. However, people have different views on the subject. Developing countries represent substantial new markets in areas in which local industry capacity may be inadequate to meet demand. Construction law is closely related to contract law, which is the main source of development of market economy. In this aspect construction law, construction market and market economy are closely related to the business sphere and environment, undividable part of which come to be market freedoms. In nowadays globalizing world the problem of freedom of movement come to be one of the most important issues of market economy. The relation between internal market freedoms (the so-called “fundamental freedoms”) and fundamental rights is a recurring question in EU law. In recent years, after rulings such as Schmidberger, Omega, Viking, and Laval, attempts to provide a framework for approaching and resolving clashes between fundamental freedoms and fundamental rights have acquired a special urgency. The dominant focus in the literature is on what happens when free movement and fundamental rights pull in different directions. Yet, the question of whether fundamental freedoms should be regarded as fundamental rights also deserves close scrutiny. It is especially important to understand the implications of this classification since the EU Charter of Fundamental Rights appears to treat some, but not all, fundamental freedoms as fundamental rights. In particular, the Charter seems to regard the free movement of persons and services as fundamental rights, but not the free movement of goods or the free movement of capital. A similar approach is exhibited in the case law: While the Court recognizes the fundamental rights character of free movement of persons, it does not appear to extend that characterization to the entirety of free movement law. The presented paper has its aim to attempt to make sense of this dichotomy by relying on an account of fundamental rights that adopts a non-instrumental focus on the right-holder. It argues that certain free movement provisions, namely the free movement of goods and capital, cannot be characterized as fundamental rights because they are inherently instrumental—they are a means to the internal market end. By contrast, the other free movement provisions appear to match the account of fundamental rights adopted here. As this article aims to show, the classification of certain, or all, fundamental freedoms as fundamental rights is a question that affects the interpretation of the scope of the free movement provisions.
Statutory dispute resolution
The british perspective

Richard BAILEY
Chairman of the Society of Construction Law and President of the European Society of Construction Law

1. Adjudication: an introduction to adjudication

This is a paper given to the Romanian Society of Construction Law at their inaugural conference from 19 to 21 March 2015. The purpose of this paper is to introduce the participants at the conference to statutory dispute resolution in the United Kingdom. Statutory adjudication, which was introduced by the Housing Grants, Construction and Regeneration Act 1996 and came into force for all construction contracts in the United Kingdom entered into after 1 May 1998 has been a highly successful method of resolving disputes in the construction industry. The author is someone who has been heavily involved in adjudication. This paper introduces the delegates to adjudication and strongly recommends that they give consideration to it as a way and means of resolving disputes in the construction industry quickly.

I also look briefly at dispute boards and how in the UK dispute boards can be compatible with the requirements of the Housing Grants, Construction and Regeneration Act 1996 (as recently amended in 2011).

2. What is adjudication?

The Housing Grants, Construction and Regeneration Act 1996 (The Act) introduced a statutory right for parties to a construction contract in the United Kingdom to refer their disputes to adjudication. The Act put into effect a key recommendation made in Sir Michael Latham’s report, Constructing the Team, published in July 1994, that there should be a speedier and cheaper means
of resolving construction disputes, underpinned by legislation.

Prior to the Act coming into force on 1 May 1998 it was intended to avoid the problem that previously beset the construction industry of long-running arbitration or court litigation keeping one party out of its money, while having to fund expensive legal costs to recover that money. Many sub-contractors and small construction companies, unable to afford this expensive and lengthy process, were simply unable to enforce payment or contractual entitlements. Adjudication was designed to produce a cash-flow remedy during the progress of a construction project.

It has been a phenomenal success with thousands of adjudications taking place every year and with the number of arbitrations and court claims declining massively.

Features of adjudication include:

- A statutory right to adjudicate that the parties cannot contract out of. A party to a construction contract has the right to refer a dispute to adjudication “at any time”.
- A mechanism for resolving disputes in construction contracts on an interim basis. Adjudicators’ decisions are binding on the parties until the dispute is finally determined by legal proceedings, by arbitration or by agreement.
- A speedy and cost effective means of resolving disputes (the Construction Act 1996 provides for 28 days between the referral to the adjudicator and the adjudicator’s decision, although that period may be extended by agreement).

Interim payment disputes
- Delay and disruption claims.
- Extension of time claims.
- Cost recovery.
- Final account disputes.

3. Statutory framework governing adjudication

The statutory framework governing adjudication is determined by the:

- Housing Grants Construction and Regeneration Act 1996
- Scheme for Construction Contracts 1998.


The statutory provisions governing adjudication are found in sections 104, 105, 106, 107 and 108 of Part II of the Construction Act 1996. These:

- List the minimum requirements for an adjudication procedure, which must be included in every construction contract (section 108).
- Give a party to a “construction contract” the right to refer a dispute to adjudication unilaterally “at any time” (section 108(2)(a)).
- Determine the kinds of contract that are “construction contracts” and are subject to Part II of the Construction Act 1996 (sections 104-106).

In summary, the Construction Act 1996 provides that a party to a construction contract (section 104) has the right “at any time” to refer a dispute to adjudication under a Construction Act-compliant procedure (section 108(1)), provided that the contract is for the carrying out of construction operations (section 105(1)). A number of specific types of work and types of contract are excluded from construction operations (section 105(2)), and the Secretary of State may by order make specific exclusions (section 106) from the definition of construction contracts. The parties to a construction contract cannot contract out of these provisions.
Section 107 was repealed for all construction contracts entered into after 1 October 2011 and there is no longer a requirement for the construction contract to be an agreement in writing.

5. Scheme for Construction Contracts 1998

Part II of the Act is supported by the Scheme for Construction Contracts (England and Wales) Regulations 1998 (SI 1998/649) (Scheme for Construction Contracts 1998) and the Scheme for Construction Contracts (Scotland) Regulations 1998 (SI 1998/687) (Scheme for Construction Contracts (Scotland) 1998) in Scotland. If a construction contract does not include all of the adjudication provisions required by section 108 of the Construction Act 1996, the provisions in Part I of the Scheme for Construction Contracts 1998 will be implied into the contract.

6. Enforcing adjudicators’ decisions

A successful party to an adjudication may apply to the Technology and Construction Court (TCC) to enforce an adjudicator’s decision. The TCC has made it clear that it will enforce an adjudicator’s decision unless the adjudicator:

- Exceeded his jurisdiction.
- Materially breached the rules of natural justice. (Natural justice requires that every party has the right to a fair hearing and the right to be heard by an impartial tribunal. Breaches of natural justice include bias, failure to act impartially and procedural irregularity. Section 108(1) of the Construction Act 1996 requires the adjudicator to act impartially although the threshold is very high.)

7. Construction contracts after 1st October 2011

The Construction Act 1996 was the subject of considerable review and consultation lasting for over 6 years. Part 8 of the Local Democracy, Economic Development and Construction Act 2009 (LD-EDC Act 2009) sets out the amendments that apply to Part II of the Construction Act 1996 from 1st October 2011 in England and Wales and 1st November 2011 in Scotland. This note refers to both dates as the effective date.

Since the effective date:

- A construction contract no longer has to be in writing, it can be partly or wholly oral. However, there is a requirement that the parties’ adjudication agreement is in writing, or the Scheme for Construction Contracts 1998 will apply to the adjudication.
- The parties’ adjudication agreement must include a slip rule, allowing the adjudicator to correct his decision to remove clerical or typographical errors.
- Parties cannot agree who will pay each others’ legal costs of the adjudication before the adjudication notice is issued. If they do, that agreement will be ineffective. The parties are only able to agree who pays legal costs in writing after service of the adjudication notice. However, the parties can still give the adjudicator jurisdiction to allocate the adjudicator’s fee and expenses between them in his decision, provided they do so in writing in their construction contract or in writing after the adjudication notice.
8. Overview of the conduct of adjudication: flowchart
The stages leading up to and during the conduct of adjudication are as follows.

9. History of international dispute boards
Dispute boards originated in the construction industry in the United States of America, with the first reported use in the 1960s. In the 1970s, dispute boards were used in civil engineering works, particularly dams, water management and contracts for underground construction. The Eisenhower Tunnel in Colorado, built in the mid-1970s, was one of the first projects to successfully use a dispute board and it set an example that was followed throughout the US.

The first international project to use a dispute board was the El Cajon Dam in Honduras. This project was partly funded by the World Bank and involved an Italian contractor, a Swiss engineer and a Honduran employer.

The DRBF estimates that dispute boards have been involved in over 2,000 projects worldwide.
10. The World Bank and other development banks
The World Bank first introduced dispute boards into its documents in the 1991 edition of its Sample Bidding Documents for Procurement of Works. At the time, developers were asked to consider a dispute board within the contractual procedure for the settlement of disputes; they were not required to include one as part of the dispute resolution mechanisms. The dispute board, if included, published a non-binding recommendation.

In January 1995, the World Bank published a new standard bidding document Procurement of Works. For the first time, the World Bank required a dispute board to be used from the outset of the contract if it was providing funding. It published a further revision of this procurement document in May 2000, which required the parties to include a dispute board and to comply with the dispute board’s recommendation immediately, moving away from a non-binding to an interim-binding determination.

The number of members on the dispute board is determined by the estimated value of the works:
- If more than US$50 million, three members.
- Between US$10 - 50 million, one or three members.
- Below US$10 million, the parties can appoint an adjudicator after the dispute arises.

Other development banks have followed the World Bank’s lead. Although they initially only recommended using a dispute board, in May 2005, a group of MDBs and international financial institutions (including the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development and the World Bank) reached agreement on a new procurement document, the MDB Harmonized Conditions for Construction. The main aim was to simplify the financing of contracts jointly by two or more development banks.

The contract is known as the Pink Book. In June 2010, FIDIC published a new version of the Pink Book. The Pink Book requires borrowers to include a DAB in every contract where the development banks are providing funding, regardless of the estimated amount of the contract. These rules are similar to the FIDIC Red Book dispute board rules. The dispute board issues a decision, which is interim-binding.

11. FIDIC
Historically, disputes that arose under FIDIC engineering contracts were referred to the engineer, whose decision was final, unless there was a subsequent arbitration award. This process was criticised because:
- The engineer was not seen as an independent consultant.
- Disputes that arose from the engineer’s actions resulted in the engineer sitting in judgement on his own behaviour.
- Referring the engineer’s decision to arbitration resulted in disputes lasting for many years.

In 1995, FIDIC published a new form of contract and introduced a dispute board to resolve disputes for the first time. Subsequent contract conditions published by FIDIC (known as the Red, Pink, Silver and Yellow Books), have all adopted a dispute board as the primary mechanism for resolving disputes. They each adopt a DAB, which issues an interim-binding decision.

In 2009, in response to requests from MDBs for an internationally recognised form of subcontract, FIDIC published a test sub-contract for use with the Red and Pink Books. FIDIC has now followed that test sub-contract with the 2011 sub-contract. Parties can refer disputes that are specific to the sub-contracting relationship to an ad-hoc DAB.
12. ICC
The ICC published its own rules on dispute boards in 2004, for use with any form of contract. In addition to rules appointing a DRB or a DAB, it also created a hybrid: the DCB. If the parties agree to adopt the ICC dispute board rules, the dispute board is established at the time the contract is entered into.

During 2012, the ICC set up a task force to review various rules, includes its dispute board rules. The ICC said it would only make change if „it is genuinely useful or genuinely necessary to do so“. Initial reports suggested the revised rules would be approved in spring 2013, but to date we have not seen them.

13. History of dispute boards in the UK
Dispute boards have been successfully used on a number of major projects in the UK. However, the Construction Act 1996 was not in force when the contracts for these projects were entered into.

In The Channel Tunnel Group Ltd and another v Balfour Beatty Construction Ltd and others [1993] AC 334, the House of Lords held that a dispute resolution clause that had been chosen by competent commercial parties, and which included a dispute board, should not be interfered with.

It is worth noting that the contract wording in Channel Tunnel v Balfour Beatty was identical to that adopted by FIDIC in sub-clause 20 of its suite of contracts.

As a result of Channel Tunnel v Balfour Beatty, parties in the UK must comply with a dispute board determination until it is revised by arbitration or litigation.

**UK projects that have used dispute boards**

14. Docklands Light Railway
This project cost approximately US$500 million and used two three-person dispute boards, one technical and the other financial, working under the same chair. All the dispute board members were chosen by agreement between the parties. The dispute boards met quarterly and attended the site approximately ten times. No disputes were referred to the boards, but if they had issued a determination, it would have been interim-binding.

15. What is a dispute board?
A dispute board is a project-specific adjudication process not to be confused with the UK’s statutory body. It is an alternative to more conventional methods of dispute resolution, such as arbitration or litigation.

The features of a dispute board include:
- Its role is to facilitate co-operation and prevent an adversarial attitude developing between the parties. It uses active dispute management to help the parties to reach a compromise.
- Its proceedings are confidential. They should remain confidential unless both the parties and the board members agree otherwise.
- It is created by agreement between the parties. The construction contract establishes the dispute board and gives it jurisdiction to hear and advise the parties on issues and disputes as they arise. The parties enter into a tri-partite agreement with each board member.
- At the outset, the employer may choose to set up a dispute board. For example, the employer may select a FIDIC standard form of engineering contract or may amend the dispute resolution clause in another contract.
- If the World Bank or certain development banks provide funding, the parties will be required to use a dispute board. Even if the dispute board is not in the original contract terms, the parties may appoint a dispute board at a later stage.
- It will be appointed on either a standing basis or an ad hoc basis.
Standard forms of contract (such as the FIDIC Red and Pink Books) require the parties to establish a dispute board from the outset of the project. This is known as a standing board. If not, the parties appoint the dispute board on an ad hoc basis when a dispute arises (as provided for in the FIDIC Silver and Yellow Books).

The dispute board rules adopted by the parties will determine how the dispute board operates. They will also dictate whether the determination issued by the dispute board is a non-binding recommendation (see Non-binding recommendation) or interim-binding decision (see Interim-binding decision).

The parties decide how complicated or large a project has to be, before a dispute board would be considered appropriate and cost-effective.

Dispute boards are suited to large international projects, such as construction of Hong Kong’s airport and the hydroelectric project at Ertan in China. They have also been used on infrastructure projects in the UK, such as Docklands Light Railway and the Channel Tunnel.

The dispute board is usually made up of three board members. They are independent and impartial individuals, typically selected and appointed by the contracting parties at the outset of the project, before any disputes have arisen.

16. Differences with other forms of alternative dispute resolution (ADR)

Although dispute boards are a form of ADR, dispute boards are different from other methods of ADR:

- By being appointed at the outset, the board members become familiar with the project and issues as they arise.
- The board members are a part of the project and can be seen as part of the project team.
- By being a part of the project, the board members may influence the parties’ behaviour during the contract. In turn, this may affect the parties’ performance under the contract.
- The dispute board provides a regular and continuing forum for discussion of difficult or contentious issues. This allows the parties to communicate with each other regularly and prevent issues and disagreements becoming disputes.
- The dispute board is not restricted to procedural formalities. If requested, it may provide informal opinions or advice to the parties, as well as a written determination.
- The process of referring an issue or dispute to the dispute board is straightforward, and the dispute board procedure is set out in the dispute board rules.
- The dispute board’s determination should be quicker than more conventional methods of dispute resolution.

Compare this with the UK adjudication

17. Types of dispute boards

These are the three main types of dispute board are:

- Dispute Adjudication Board (DAB).
- Dispute Conciliation Board (DCB).
- Dispute Review Board (DRB).

Looking at each one in turn

18. Dispute Adjudication Board

DABs are used by FIDIC, the World Bank and MDBs. The FIDIC Pink Book adopts the term Dispute Board (DB) for its DAB. Somewhat confusingly, the ICE also uses a DAB, adopting the name Dispute Resolution Board.

A DAB issues a decision. This is a definitive answer and is interim-binding on the parties when
it is issued (see *Interim-binding decision*). The parties must comply with it and, unless either party serves a notice of dissatisfaction within the specified contract period, the decision is final and binding (see box, Notice of dissatisfaction). If a party serves a notice of dissatisfaction, the dispute will then be dealt with by arbitration or litigation.

Examples include clause 20 of the FIDIC Red and Pink Books.

19. **Dispute Conciliation Board**

The ICC introduced DCBs in 2004.

A DCB can issue either a decision or a recommendation (see *Non-binding recommendation*). The dispute board normally issues a recommendation. However, one party may request a decision; if the other agrees, the dispute board can issue a decision. To give the process certainty, the parties may find it helpful to agree, at the outset, whether the dispute board is to issue a decision or a recommendation.

If a party is dissatisfied with the determination, as with the other types of dispute board, they must serve a notice and resort to arbitration or litigation.

20. **Dispute Review Board**

DRBs originated in domestic projects in the USA. The AAA uses this type of dispute board and it is one of the three types offered by the ICC. Both organisations adopt the name Dispute Resolution Board. The DRBF also favours this process.

A DRB issues a recommendation. This is a reasoned suggestion to the parties, which is not binding on the parties when it is issued. It becomes final and binding if neither party serves a notice objecting to the recommendation within the specified contract period.

**Other disputes**

21. **Dispute advisory board**

A dispute advisory board is a dispute board that is only chosen if the parties need it. It is similar to a DRB and gives a non-binding opinion.

22. **Dispute mediation board**

A dispute mediation board is a dispute board made up of mediators who are appointed at the outset of the project to help the parties resolve problems before they become disputes. CEDR launched its Model Project Mediation Protocol in December 2006.

Key components of project mediation using a dispute mediation board include:

• The employer, contractor (known as the core parties) and identified consultants, sub-contractors and specialist suppliers (known as key suppliers) enter into the mediation agreement. Subsequent suppliers may be joined to the mediation agreement.

• The appointment of and access to one or two mediators for the duration of the project.

• Project mediators visit the site regularly and have a working knowledge of the project.

• A project mediation workshop is held with all core parties and key suppliers before starting the project.

• The parties can use the dispute mediation board framework to hold a formal mediation, if required.
23. Dispute review expert
A dispute review expert is an individual who functions in a way similar to a DRB, but is appointed for projects financed by the World Bank when it is not necessary to appoint a three-person dispute review board.

24. Dispute board procedure rules
A number of international organisations publish dispute board rules. These include the:
• AAA, which adopts a DAB.
• DRBF, which adopts a DRB.
• FIDIC’s Red, Pink, Silver and Yellow Books, and its 2011 sub-contract (for use with the Red and Pink Books), which each adopt a DAB (the Pink Book dispute board is known simply as a Dispute Board).
• ICC, which offers three alternatives: DRB, DAB and CDB.

During 2012, the ICC set up a task force to review various rules, includes its dispute board rules. The ICC has said it will only make changes if “it is genuinely useful or genuinely necessary to do so”. Initial reports suggested the revised rules would be approved in spring 2013, but nothing has been published to date.
• ICE, which offers two DRB procedures: alternative one and alternative two (alternative two is for use on UK projects that are subject to the Construction Act 1996.

In October 2013, the Chartered Institute of Arbitrators (CIArb) launched a consultation on its plans to draft and publish a set of dispute board rules for use on medium and long-term projects. The consultation closed on 21 November 2013. For more information, see Blog post, Dispute board rules – you decide.

25. Nature of the determination
Dispute boards issue two types of determination:
• A non-binding recommendation.
• An interim-binding decision.

The parties’ choice of dispute board procedure will dictate the nature of the determination. As a general rule:
• A DRB issues a non-binding recommendation.
• A DAB issues an interim-binding decision.

At the outset, the parties need to decide on the type of determination the dispute board is to issue.

26. Non-binding recommendation
A non-binding recommendation is not binding at the time it is issued. The determination will normally become final and binding on the parties after the expiry of a prescribed period (often 28 or 30 days), unless one party serves a notice of dissatisfaction (see box, Notice of dissatisfaction).

The recommendation can still be effective, even though it is non-binding, and the parties are still likely to accept it at the time because:
• It will have been issued by individuals whom the parties have respect for (having nominated and appointed them), and who they know have an understanding of the project and issues that have arisen.
• If the determination is admissible as evidence in subsequent proceedings, where it may influence the arbitrator or judge, the parties may not wish to appear unreasonable.
• Over the course of a long-term project, it is likely that a party will „win some, lose some“. To ensure the dispute board process works, each party will have to comply with less favourable determinations, as well as those that it perceives as favourable.
Arguments in favour of a non-binding determination include:
- The parties are provided with independent advice. Even if the parties do not accept all that advice, it might help them to resolve their differences through negotiation.
- The process is more informal and retains its consensual nature, which means less preparation is required for the hearing.
- The hearing will be shorter, simpler and cheaper.
- The process accommodates cultural differences.

Arguments against a non-binding determination include:
- The parties may not take the process seriously.
- By serving a notice of dissatisfaction, a party can negate the effect of the determination and postpone resolving the dispute until a future date.

27. Interim-binding decision
When an interim-binding decision is issued, the parties must implement it. The FIDIC contracts all contemplate interim-binding decisions. The parties are contractually bound to comply, and will be in breach of contract if they fail to comply with it. If either party is unhappy with the determination, they may issue a notice of dissatisfaction within the prescribed period (often 28 or 30 days).

While the notice allows a party to challenge the decision later, it must still comply with the decision until the challenge is determined. If neither party issues a notice of dissatisfaction, the determination will become final and binding.

Arguments in favour of an interim-binding decision include:
- The binding nature of the determination will focus the parties’ minds towards settlement.
- Failure to comply with the determination can be enforced through arbitration or the courts as a breach of contract claim, perhaps using expedited procedures.
- It may allow for cultural or political differences (such as overcoming allegations of corruption) by ensuring that payments can be made because they are compulsory.

Arguments against an interim-binding decision include:
- The parties must comply with the decision, even if there are errors or mistakes made by the dispute board members.
- It is a less consensual process because the parties must comply with the decision.
- Parties will fight harder because there is more at risk. They will involve more legal and technical experts, which will increase the preparation time, the hearing length and the costs of the process.

28. Notice of dissatisfaction
If either party is dissatisfied with the dispute board’s determination or decision, it may register that dissatisfaction by serving a notice on the other party and the dispute board. The notice is usually a pre-condition to arbitration or litigation. If neither party serves a notice of dissatisfaction, the determination becomes final and binding on the parties and the dispute cannot then be referred to arbitration or litigation. However, the parties are still free to reach an amicable settlement.

The notice should refer to the dispute between the parties and give reasons for the dissatisfaction.

The FIDIC Pink Book is the only FIDIC contract that currently defines notice of dissatisfaction. A notice of dissatisfaction under the Pink Book means a party’s notice given under clause 20.4 “indicating its dissatisfaction and intention to commence arbitration”.

The time limit for serving a notice of dissatisfaction is usually enforced strictly by the courts. For an example of a failed attempt to extend the time for service of the notice, applying section 12
of the Arbitration Act 1996, see Fermanagh District Council v Gibson (Banbridge) Ltd [2014] NICA 46, as discussed in Legal update, Court considers extension of time under section 12(3)(a) Arbitration Act 1996. Although the case concerned the provisions of a NEC2 Engineering and Construction Contract (ECC), the relevant provisions are also reflected in the later NEC3 versions of the ECC.

29. Interim-binding decision
The parties must implement an interim-binding decision immediately. The prescribed period for any notice of dissatisfaction is:
- Under the ICC DAB procedure rules, within 30 days of the determination.
- Under the ICE and FIDIC procedure rules, within 28 days of the determination.

30. Non-binding recommendation
With a non-binding recommendation, it will become final and binding on the parties after a prescribed period has expired unless one party serves a notice:
- Under the ICC DRB procedure rules, within 30 days of the determination.
- Under the AAA procedure rules, within 14 days of the determination. The parties must give notice of acceptance or rejection of the determination. Failure to respond is deemed to be acceptance of the determination.
- Under the DRBF rules, within 14 days of the determination or within 14 days of a response from the dispute board to the request for clarification or reconsideration. The parties must give notice of acceptance or rejection of the determination. Failure to respond is deemed to be acceptance of the determination.

31. Should I include a dispute board in my contract?
Whether a party should include a dispute board in its contract will depend on the nature of the project works and the standard form adopted by the parties. For instance, engineering contracts such as FIDIC include a dispute board as part of the dispute resolution provisions. Also, certain funders (such as the World Bank and other development banks) require the parties to include a dispute board in the contract when they are providing funding. Other dispute board rules, like the ICC, ICE and AAA rules, are free standing and may be adopted by the parties (that is, the parties can agree to include them in the contract, but they are not included by default).

When deciding whether a dispute board is appropriate for a construction or engineering project, the parties should consider:
- Any previous relationship between themselves.
- How familiar they are with the size and complexity of the project.
- The value of the contract.
- Whether the funder requires a dispute board to be included in the contract.
- Whether including provision for a dispute board could show the employer’s willingness to avoid disputes and keep focused on the project. This may be attractive to potential bidders.

32. Advantages of a dispute board
The advantages of a dispute board include:
- It establishes a culture of claim avoidance.
- It may facilitate positive relations, open communication, trust and co-operation between the parties.
- It can help settle issues promptly, before they escalate into disputes.
- It can provide an informal forum with well-informed individuals, who are familiar with the project, to resolve disputes.
• It is often cost effective. Resources can remain focused on the job, rather than concentrating on resolving disputes.
• The determination will be influential in subsequent proceedings, if these are necessary.
• The existence of the dispute board may influence the parties’ behaviour, so that issues are dealt with and the number of disputes is minimised. In practice, this may only be true on the largest of projects, because of the “standing costs” of a dispute board.

33. Disadvantages of a dispute board
The disadvantages of a dispute board include:
• It can be costly. The parties are jointly liable for the direct costs of the board members plus any additional time spent resolving disputes.
• Dispute board members may make a determination that is contractually or factually incorrect, or try to impose their own ideas on the parties.
• The determination may be nothing more than a compromise between the parties’ positions.
• The dispute board’s enquiry is limited and takes place without the opportunity for a proper, judicial examination of evidence.
• The process is a “claims review” rather than dispute resolution, since the dispute board generally gets involved late in the process, after one party has prepared a detailed claim.
• The process is perceived as contractor friendly.

34. What is the adjudication timetable?
Section 108 of the Construction Act 1996 requires a construction contract to provide a timetable for adjudication:
• Within seven days of the notice of adjudication, the adjudicator must have been appointed and the dispute referred to him.
• Within 28 days of the referral of the dispute to the adjudicator, the adjudicator’s decision is due.
• The period for the decision can be extended by 14 days if the referring party agrees.
The parties are not prevented from jointly agreeing to more time, if it is required by one party or the adjudicator.

35. Is there a relationship between dispute boards and the Construction Act 1996?
Whether there is a relationship between dispute boards and the Construction Act 1996 depends on whether the parties are parties to a construction contract:
• If they are not parties to a construction contract under the Construction Act 1996, there is no relationship between the Act and the dispute board.
• If they are parties to a construction contract under the Construction Act 1996, there is an important relationship between the Act and the dispute board.

36. Not parties to a construction contract
If the parties are not parties to a construction contract, there is no relationship between the dispute board and the Construction Act 1996:
• Neither party has a statutory right to refer disputes to adjudication.
• The parties may have a contractual right to adjudicate, if adjudication is part of the dispute resolution clause in their contract.
• The parties may agree to include a dispute board in their contract.
In practice, projects where the parties may create a dispute board are often not for “construction operations” under the Construction Act 1996. For example, section 105(2)(c)(ii) means that
the parties to a contract for the production, transmission, processing or bulk storage (other than warehousing) of chemicals, pharmaceuticals, oil, gas, steel or food and drink are not parties to a construction contract. This kind of project might use, for example, a FIDIC contract.

37. Parties to a construction contract
If the parties are parties to a construction contract, there is a statutory right to refer a dispute to adjudication at any time. In that case, there is a relationship between the dispute board and the Construction Act 1996. This means that:

• The parties cannot contract out of the Construction Act 1996. Therefore, the parties cannot delete or replace the adjudication provisions of their contract with a dispute board. If they do, all of the adjudication provisions in Part I of the Scheme for Construction Contracts 1998 will be implied into their contract.

• The parties can include an alternative dispute resolution clause in their contract, which may include a dispute board, but they cannot make using that mechanism a condition precedent to a referral to adjudication.

• If the parties use a standard form contract that does not comply with section 108 of the Construction Act 1996 (such as FIDIC), the adjudication provisions in Part I of the Scheme for Construction Contracts 1998 will be implied into their contract.

• One party cannot complain if the other party refuses to use the dispute board. The parties are free to refer a dispute to an adjudicator at any time.

If the parties have agreed to use a dispute board, they must ensure the dispute board provisions comply with the Construction Act 1996, otherwise, they may find the adjudication provisions in Part I of the Scheme for Construction Contracts 1998 will be implied into their contract.

38. Can I replace adjudication with a dispute board?
If the parties are parties to a construction contract and they replace the adjudication provisions in their contract with a dispute board, the adjudication provisions in Part I of the Scheme for Construction Contracts 1998 will be implied into their contract.

If the parties choose to include a dispute board in their contract, they may:

• Adopt a standard dispute board procedure that has been drafted specifically to comply with section 108 of the Construction Act 1996 (see Which dispute board rules comply with the Construction Act 1996?).

• Amend the dispute board provisions in the standard form contract to ensure that they satisfy the requirements of section 108 of the Construction Act 1996 (see How do I make the dispute board provisions comply with the Construction Act 1996?).

• Prepare a bespoke dispute board procedure that satisfies the requirements of section 108 of the Construction Act 1996 (see How do I make the dispute board provisions comply with the Construction Act 1996?).

When drafting the dispute board provisions, the parties must ensure that the dispute board procedure complies with section 108 of the Construction Act 1996, otherwise the procedure will be void and replaced with the adjudication provisions in Part I of the Scheme for Construction Contracts 1998.

39. Can I include a dispute board alongside adjudication?
The parties to a construction contract should not include dispute board provisions alongside the adjudication provisions in their contract. The advantages of a dispute board include:

• Establishing a culture of claim avoidance.

• Settling issues promptly, before they escalate into disputes.
• Facilitating positive relations, open communication, trust and co-operation between the parties.
• Providing an informal forum to resolve disputes, with well-informed individuals who are familiar with the project.
• Being cost effective, by settling issues before they become disputes.
  Many of these advantages will be lost if the parties have parallel provisions:
  • Both processes are designed to give the parties a quick decision, but a party would have to decide which method to choose to resolve a dispute.
  • Adjudication is a more adversarial process. This is contrary to the aims of the dispute board.
  • Dispute boards are intended to resolve issues before they become disputes. The parties would have to establish whether there was a dispute that could be referred to adjudication. This would involve deciding at what point an issue becomes a dispute.
  • If the dispute board was already looking at an issue, which was then referred to adjudication, there would be parallel proceedings. This would lead to uncertainty and confusion, as there would be two decisions: one from the adjudicator and one from the dispute board. The parties would be bound by both, even if they were contradictory.
  • The parties share the cost of the dispute board equally. Employing an adjudicator on top of this cost would be an unnecessary additional expensive.
  To avoid this, the parties may adopt or create a dispute board-style adjudication.
  • The timetable of the referral complies with section 108, including the determination being received within 28 days of the referral (see What is the adjudication timetable?).
  • The other requirements of section 108 of the Construction Act 1996 are satisfied.
  In practice, the parties might use or adapt a standard set of dispute board rules that comply with the Construction Act 1996.

40. Conclusion
I know I am biased, but I really do recommend adjudication to anyone. Adjudication is spreading around the globe with adjudication laws in Australia, New Zealand, Singapore, Ireland and it has been actively looked at in Germany and a number of other jurisdictions. Adjudication has the great advantage that it is fairly cheap, quick and creates an interim binding decision that all parties are forced to live by. It is probably one of the most important pieces of construction related legislation passed in the United Kingdom and I know it something that is of great interest throughout Europe.
International construction law as a ‘Private Legal System’: emerging from the ‘primordial soup’ in the search for coherence

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1. What is ‘international construction law’?
This seems an odd question to ask.

To the observer, construction law appears to be a highly developed and active area of practice around the world. There are now Societies of Construction Law in more than a dozen regions, hundreds of texts and articles have been written on the subject\(^1\), and many thousands of cases and statutes have emanated from courts and legislatures in relation to construction projects. Each year, millions of contracts – formal and informal – are entered into for construction work, and, as a global community, we collectively engage in billions of interactions with the built environment.

The prodigious activity of the industry and its lawyers is, therefore, undeniable. However, as is noted by Julian Bailey at the outset of his magisterial text on the subject, the ‘term „construction law” admits

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\(^1\) See, eg, the listings at http://unimelb.libguides.com/construction_law1.
of no easy definition'.2 Whilst he goes on to offer that it ‘is the law that applies to and in respect of the undertaking of construction and engineering projects’, Bailey recognizes that this deceptively-simple conception covers a diverse and complicated legal matrix. It encompasses specialist court lists, legislation and legal practice and ‘hegemonic’ industry standard forms.3

To these key, documented manifestations of construction law may be added less visible, yet instrumental, factors such as the expectations of financiers, ratings agencies and insurers, and well-established (yet, often unstated or conflicting) understandings within the construction professions about how work is to be planned and executed.

As a result, the description of Professor Philip Bruner remains apt in 2015:

‘Construction law today is a primordial soup in the „melting pot” of the law – a thick broth consisting of centuries-old legal theories fortified by statutory law and seasoned by contextual legal innovations reflecting the broad factual „realities” of the modern construction process’.4

This paper peers into this broth, posing the dual-limbed question whether greater coherence in international construction law is desirable and possible. It answers ‘yes’ to both elements:

- Section 2 argues that disparity in approaches to the legal regulation of construction (that is, differences between jurisdictions or disconnects between law and sound industry practice) tends inevitably towards inefficient allocation of resources, whether by legislators or construction organisations.

- Section 3 explores the route to achieving greater consensus suggested by scholarship which has examined the way in which transnational commercial communities foster ‘private legal systems’ (PLSs). These promote opting out from generally-applicable regulatory frameworks in favour of enforcing rights and resolving disputes within that community. Ways in which international construction practice routinely exhibits PLS-type features are identified.

This leads to the paper’s key proposal (section 4). It is that explicit recognition of an already-extant PLS in international construction may well assist in building a more coherent framework for international construction law. In turn, such a framework could allow a more principled delineation of the proper limits of state-based regulation (whether via legislation or public courts) upon this vital area of commercial endeavour.

2. Is greater coherence in international construction law desirable?

As a general principle, the virtue of coherence in the law – or, put another way, the reduction in disparity of approaches to like issues by different legal systems – seems self-evident. Indeed, appellate courts increasingly are recognising such desirability5, and organisations such as UNCITRAL hold ‘harmonisation of applicable norms and standards [as their] very raison d’être’, ... recogni[sing] the incentive to international participation where businesses know what to expect in overseas markets6.'

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3 Ibid, 3.
Construction law commentary is replete with criticisms of judicial rulings and (perhaps, more prevalent in recent years) legislation which display such disparity. Australia has been particularly fertile ground for such criticism due to its federal constitutional arrangements, which mean that many core construction law issues fall within the legislative purview of the eight states and territories and therefore, naturally, are subject to parochial influences. This has led, for example, to there being eight different legislative approaches to ‘security of payment’ in the industry.

The tendency towards legislative parochialism seems inevitable in geographically-constrained democratic systems: after all, lawmakers’ primary responsibility is to their constituents. However, from a cross-border commercial perspective, the resultant inconsistency of approach is anathema. For example, a 2014 research report by the Society of Construction Law Australia observed that there ‘is more or less universal support… that there should be a single set of rules for adjudication in the construction industry’. More forthrightly, Julian Bailey has termed the situation ‘exasperating’, leading him to query the continuing need for ‘separate parliaments, courts and executive governments for each and every jurisdiction’.

In another area of legislative intervention in Australia, ‘proportionate liability’, there is disparity not only as between jurisdictions but also because its underlying intent is to overturn a key tenet of contract law: joint and several liability. As noted by international construction lawyer Andrew Stephenson, the ability to assume the prevalence of joint and several liability ‘allows debt, equity and government to be satisfied that the joint promisors… have the capacity to deliver on the promises they made or to pay damages in the event that they fail to so deliver’. When the reforms were first brought in on a widespread basis, Stephenson predicted that, given the regimes’ ‘uncertainty and the futility of bargaining for contractual allocation of risk, it is likely that well informed parties will seek to avoid the operation of apportionment legislation’.

The proposition that parties might go out of their way not to comply with a legal requirement may seem radical or revolutionary in some quarters. Yet, according to a scholar of the ‘contract minimalist’ school, Dr Jonathan Morgan, this behaviour is de rigueur within the commercial community. His thesis includes that, where contract law seeks to pursue goals outside of ‘provid[ing] workable rules for business-to-business transactions[,]… [s]ophisticated commercial parties will contract out of undesirable rules or exit the legal system altogether.’

The past decade has borne out these predictions in respect of proportionate liability. It has seen many attempts made – including at the highest level of Australia-wide reform, the Standing Council

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11 Bailey, above n 2, 9.


13 Ibid, 90.

of Law and Justice (SCLJ) – to enact harmonized legislation. These have, to date, borne little fruit. It seems clear that disagreement over the ability to contract out of the legislation remains a significant stumbling block, and that the views of construction lawyers on this point are at odds with the broader commercial law community. Indeed, in its submission to the SCLJ, the Law Council of Australia (representing 56,000 lawyers) noted that its Infrastructure and Construction Law Committee was one of two constituent bodies which did not endorse the prohibition upon contracting out.\(^{15}\)

The Australian experience with security of payment and proportionate liability is, it is submitted, emblematic of the reaction of the international construction law community to lack of coherence. As has been noted above, not only is it criticized as leading to inefficiency, it prompts reactions ranging from seeking to contract out of the generally-applicable legal regime (Stephenson) through to challenging the very existence of parochial institutions (Bailey). This willingness to set aside localized norms has resonance with PLS-based structures which have been found to exist in other transnational commercial communities.

3. Does international construction operate as a Private Legal System?

3.1 What are PLSs?

Over the past quarter-century, a number of scholars, including Professor Lisa Bernstein, have identified and analysed the manner in which certain industries have 'systematically rejected state-created law. In its place, the sophisticated traders who dominate the industry have developed an elaborate, internal set of rules, complete with distinctive institutions and sanctions, to handle disputes among industry members.\(^{16}\)

These PLSSs are based upon the relevant commercial community favouring relationship-based, internalised modes of commercial interaction (including contracting and dispute resolution) which are based on a shared cultural understanding. The manifestations of these preferences are as varied as the commercial endeavours they reflect, but a sample from the literature includes:

- **Widespread (if not, close to universal) use of standard forms of contract which are bespoke to the industry:** these privilege clarity over complexity so as to avoid misunderstanding and promote certainty of outcomes, and tend towards under-compensation (as compared to general law entitlements) for default.\(^{18}\)

- **Fostering of a ‘club’ mentality amongst members of the community:** information is shared for mutual benefit and ‘non-legal sanctions’ are deployed to dissuade – and internally deal with – aberrant behaviours such as revelation of commercially-sensitive information.\(^{20}\)

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and, generally, Morgan, above n 14, ch 5.

\(^{17}\) Bernstein, above n 16 ("Opting out..."), 115.

\(^{18}\) Bernstein, above n 16 ("Private Commercial Law..."), 1742; Bernstein, above n 16 ("Opting out..."), 121-124.

\(^{19}\) For example, enforcing liquidated damages which are substantially lower than the anticipated loss, and excluding rights to ‘consequential loss’. Bernstein, above n 16 ("Private Commercial Law..."), 1733.

\(^{20}\) For example, Bernstein has traced the way in which, as the forum for cotton trading has moved from a single street in Memphis to the global village, the community has actively fostered information sharing through the trade press, functions and so forth, and favoured contractual mechanisms that promote performance rather than compensation: ibid, 1750 ff. See, similarly, Bernstein, above n 16 ("Opting out..."), 119-121 and 138-145 (on the use of reputational bonds).
**Keeping dispute resolution within the ‘club’:** this is primarily by way of expedited arbitration according to bespoke rules, with an emphasis on secrecy and there being no right of appeal to external courts on substantive grounds.\(^{21}\)

Bernstein has proposed a number of ways in which the use of PLSs offers benefits to the commercial communities which promulgate them. These involve the promotion of transactional efficiency, cooperation and performance, resulting in reductions in both the avoidable costs arising from disputes and the disparities in bargaining position which tend towards one-sided and therefore fraught commercial relationships.\(^{22}\) She has also proposed that an understanding of how PLSs ‘create value for transactors’ may help identify other industries and other contexts in which private institutions can play a positive role in supporting trade.\(^{23}\)

### 3.2 A PLS in international construction?

Taking up Bernstein’s invitation, this paper proposes that the law pertaining to international construction procurement represents a field which is ripe for analysis through a PLS lens. This is because experienced participants – whether lawyers, developers, contractors, consultants, financiers or otherwise – appear routinely to demonstrate preferences akin to those of recognized PLSs.

Broadly speaking, members of the international construction community tend to be heavy users of industry-tailored standard forms of contract,\(^{24}\) and strong advocates for their norm-setting influence.\(^{25}\) They also favour private dispute resolution through mediation, dispute boards and arbitration,\(^{26}\) and, conversely, are wary of local courts (other than specialist, expert lists such as the English Technology and Construction Court).\(^{27}\) Moreover, as was described above, the community is critical of parochial legislation which is seen unjustifiably to intervene into parties’ freedom of contract.

In addition, the community actively supports institutions which foster the growth and increased coherence of construction law across borders – operating, arguably, as a transnational ‘club’ of the type Bernstein has identified. Manifestations of this include:

- Inter-linked Societies of Construction Law, along with kindred organisations such as the International Construction Projects Committee of the International Bar Association (which has more than 1000 members) and the American and Canadian Colleges of Construction Law;
- Masters-level programmes in construction law, at King’s College London, Melbourne Law School, The University of Stuttgart and elsewhere,\(^{28}\) the mainstay of which is practitioner-led (and -focused)


\(^{25}\) Indeed, in the view of Professor John Uff QC (aligning closely with the minimalist school of contract – see Morgan, above n 14, 207-8), courts ought to have no role in interpreting these forms, as ‘the dispute is private between the parties involved’: „Origin and Development of Construction Contracts” in John Uff and Phillip Capper (eds), Construction Contract Policy: Improved Procedures and Practice (Centre of Construction Law and Management, King’s College London, 1989), 9.


\(^{27}\) See, eg, Peter Wood and Owen Cooper, „Involvement of National Courts – Anaconda v Fluor, a Cautionary Tale” (2006) 2 Asian International Arbitration Journal 163.

curriculum development and teaching;\(^\text{29}\) and

- academically-rigorous, practitioner-focused journals dealing with trans-border contracting, such as the *International Construction Law Review*, *Construction Law Journal*, *International Journal of Law in the Built Environment* and *Construction Law International*.

Thus, a strong case can be made that, at least, a ‘virtual PLS’ exists within the international construction law community. That said, these tendencies are by no means universally displayed. Indeed, it is likely the case that many construction lawyers are content to deal with their clients’ concerns on their face in accordance with the local laws, without giving a second thought to their being participants in a transnational community. Therefore, detailed empirical research is warranted to confirm whether an international construction law community can in fact be said to exist\(^\text{30}\), and – presuming, as is proposed above, that it does – the extent to which its members subscribe to PLS-type preferences\(^\text{31}\).

### 4. Is the quest for a construction law PLS worthwhile?

Morgan has noted that, for those schooled in the Birksian view that categorization and compartmentalization of legal norms is not only possible but essential\(^\text{32}\), it is ‘a serious embarrassment’ that many highly-developed aspects of commercial law sit ‘beyond the pale of proper legal understanding’\(^\text{33}\). A more coherent understanding of what construction law is – and is not – would therefore assist in its recognition within traditional academic and legal practice structures.

That said, and as was foreshadowed above, the real benefit of greater coherence lies in its reduction of needless inefficiency. Every day, around the world, construction lawyers and their clients (and, indeed, those who are affected by construction but unable to engage a lawyer) make choices about where to allocate scarce legal resources. These decisions are, like their underlying construction activities, infinitely varied. They include whether to review and negotiate a subcontract put forward by a main contractor, pursue a claim rejected by a superintendent, or commence proceedings alleging breach of a legal right. Similarly, legislators ponder which policy goals to pursue within a busy political cycle, and court administrators determine how judges manage case lists (an especially fraught issue in construction trials given their notorious factual complexity)\(^\text{34}\).

None of these decisions is without cost. Parties – whether individuals or companies – can be bankrupted by the costs of litigating even where they have a good case, or suffer financial ruin by not pursuing their legal rights. They might spend substantial amounts on contract reviews even though, in most business dealings, the ‘significance accorded to contract drafting is typically small [and the] effect of

\(^\text{29}\) Indeed, the King’s College programme was established on the basis that it was ‘entirely self-financing through generous donations from business and the professions and through fees charged for courses’: Sir Nicholas Lyell, “Construction Contract Policy: Keynote Address” in Uff and Capper, above n 25, 4. See, generally, Matthew Bell, Paula Gerber and Phil Evans, “Building Bridges in the Classroom: A View from the Academy” (2014) 30 *Building and Construction Law Journal* 24.


\(^\text{31}\) This suggestion is made with the exhortation of Professor Justin Sweet to undertake such research in construction law very much in mind, along with the challenges he identified: „Construction Law: The Need for Empirical Research” *Construction Litigation Reporter*, January 2002, 2.


\(^\text{33}\) Morgan, above n 14, 35.

\(^\text{34}\) See, eg, Hon David Byrne, „The Future of Litigation of Construction Disputes” (2007) 23 *Building and Construction Law* 398, 399; Bruner, above n 4, 17.
any “written deal” on the actual performance of an agreement may be smaller still. Likewise, well-intentioned policy-makers can expend significant time and political capital enacting laws (such as the security of payment and proportionate liability reforms discussed above) which seek to ameliorate the negative effects of the unrestrained market on certain participants yet risk imposing significant burdens on the industry as a whole.

In turn, as was illustrated above, where regulation sits in conflict with the construction industry’s preferred modes of contracting, construction lawyers tend to seek to avoid that regulation via contract. Drafting and negotiating amendments to navigate around such legislation requires careful and detailed – and, therefore, expensive – legal consideration, consuming resources that otherwise could be directed towards areas where there is a real need for legal protection and advice.

Where, though, does that ‘real need’ properly exist? This is one of the key questions which a PLS-based analysis could assist in answering. Such an analysis must commence by recognizing that international construction is distinct from other commercial pursuits where PLSs have been identified, largely because of the deep and abiding public interest which it embodies. This recognition rests upon the inherent responsibility of local, democratically-accountable legislatures (albeit, preferably, on a harmonized basis to the extent possible) to fill the gaps which market-based solutions tend inadequately to address, including in respect of safety of workers and building users and substantial disparity of bargaining positions.

Thus, it is by no means inevitably the case that recognition of a PLS would result in a vacation of the field of regulation by local legislatures. Rather, it could allow a renewed focus on the need for, and proper boundaries of, statutory intervention.

5. Conclusion

As a first step towards greater coherence, this paper encourages a recognition that the lack of a clear sense of the proper limits and interaction of the various elements of construction law – judge-made, legislative, standard forms and otherwise – makes Bruner’s ‘primordial soup’ inevitable. Therefore, by examining the extent to which a PLS exists – and, more importantly, should exist – within construction law practice, a more explicit and reasoned engagement with the broader law may be facilitated.

To stretch Bruner’s analogy further, therefore, by offering a PLS as a separate dish, the ‘thick broth’ of construction law may be rendered more transparent. In turn, it may be made more palatable to the millions of people around the world who taste it each year, and the thousands of lawyers, construction professionals, financiers and other contracting parties who are immersed in it on a daily basis.

35 Morgan, above n 14, 85.
37 A prominent area of construction contracting where such intervention does seem appropriate is in the types of residential construction statutes which are described in, eg, Philip Britton and Julian Bailey, „New Homes and Consumer Rights: England and Australia Compared” (2011) 3(3) International Journal of Law in the Built Environment 269, 277-287. That said, the proper limits of this legislation remains contestable: for example, the warranty rights available under the New South Wales Home Building Act 1989 have recently been watered down, to the likely detriment of consumers in that state.
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Problems occurred in the application of Fidic-type contractual provisions in road transport infrastructure works - roads and railways

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The FIDIC content refers to:
- provisions concerning communication, language, documentation; competences and responsibilities of the client, of the consultant, of the contractor, of the designated subcontractors, of the staff and of the labor force; equipment, materials, work teams; start, delay and suspension of the works; tests at the completion of the works; reception of the works by the client and the liability period; measurements, evaluations, omissions, modifications and adjustments; the contract price and the payment; suspension and/or termination of the contract by the contractor or by the client; risks and responsibilities of the client and of the contractor, insurances; force majeure cases; complaints, disputes and mediation with a view to resolving them.
The works taking place during construction contracts may be divided, on the basis of FIDIC regulations, as it follows:

1. a. The typical sequence of main events (execution length, delays, defects notification period);
1. b. The typical sequence of events related to payments;
1. c. The typical sequence of dispute events - which is completely different from the system adopted according to the Romanian contracting procedures and the payment on the basis of the works’ monthly situation.

The General Conditions and the Special Conditions will together include the Contract Conditions governing the rights and obligations of the parties. Special Conditions for each individual contract will need to be drawn up and those sub-clauses of the General Conditions mentioning the Special Conditions will need to be taken into consideration.

The contract conditions refer to:

- The Basic Date - The execution chart contracted – General Contractor
- The Start Date - Start order issued by the Beneficiary - Consultant
- The Performance Guarantee - submitted by the General Contractor
- The Performance Guarantee Certificate - Subcontractor Laboratory
- The Interim Payment Certificate - on the execution phase - requested by the Subcontractor
- The Completion Date - recorded by the Consultant, who receives the execution documents from the Subcontractor
- The Test upon Completion - Independent Laboratory Check - Consultant
- The Reception Certificate - issued by the Consultant
- The Defects Notification Period - issued by the Consultant
- Drawing up the Reception of the Works, Performance Certificate
- The Final Payment Certificate - approved by the Consultant

For drawing up these Contract Conditions for construction works, it is being acknowledged that, although many sub-clauses may generally apply, there are also sub-clauses which must necessarily vary in order to respond to circumstances relevant to a specific contract.

Sub-clauses considered as applying to many contracts (but not to all of the contracts) have been included in the General Conditions, in order to facilitate their introduction in each contract. An example of sub-clause currently used in contracting according to the FIDIC rules is the one related to advance payments, necessary for the constructor in order to ensure the logistics of execution on site. These advance payments are generally being made with the approval of the Consultant, on the basis of works that will be later executed by the constructor, according to the estimate of work approved by the Contract of Provision of Services signed between the General Contractor and the specialty Subcontractor.

In road transport infrastructure constructions (roads - railways), which are generally being developed on long route lengths, works are divided on Subcontractors specialized on categories of works, which operate on site according to the Execution Chart approved and updated weekly according to the problems occurring during work. The specialized echelons of subcontractors succeed each other in terms of activity according to the technological plan of work execution. Thus, the echelons of execution of earthworks, which execute the operations related to the infrastructure of the future road line of communication, start working, followed by the echelons of execution of the superstructure works. Each echelon submits to consultancy the documentation of the stages carried out, according to the contracting conditions presented before. The problems occur in the period provided in the contract for the check by the consultant of the execution's compliance.
to the project and to the quality demands in the tender books.

An example from the consulting activity will be described hereinafter, in which the activity of providing consultancy is carried out according to the conditions of the contract concluded on the basis of Romanian legislation, and the description will be made by comparison to the FIDIC standards. Obviously, the execution of the work was also aimed to comply as well with the Law 10 of 18th of January 1995 concerning quality in constructions.

- The consultant issues site notes and dispositions towards the general designer and the general contractor in relation to the execution of the works, notifying the client.
- On a daily basis, the consultant records in the site's single book the activities taking place on site and makes remarks on the findings of the checks carried out.
- The consultant verifies the conditions imposed by the execution:
  - bringing into accord the provisions in the written parts and those in the project’s drawings;
  - updating certain provisions of the tender books;
  - forwarding to the executing party the modifying execution documents;
  - the consultancy operates only by virtue of the need to resolve situations generated by the onsite execution at the request of the contractor or of the client;
- the consultant intervenes in the procedure related to establishing and setting the contract price;
- the correspondence is carried out on a daily basis through annotations in the single recording registry (the consultant is permanently connected to the surveillance of the execution of the works, so that the solutions that need to be applied on the ground have the agreement of the client and the agreement of the designer);
- reception of a part of the works.

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**The contractor submits the declaration to the engineer.**

**The engineer issues the interim payment certificate.**

The client makes the payment to the contractor

Each of the interim monthly payments (or other payments)

Final payment

- The engineer checks the declaration, the contractor transmits information

- The contractor transmits to the engineer the draft of the final declaration.

- The contractor issues the final declaration and is exonerated of other responsibilities.

- The engineer issues the final payment certificate.

- The client makes the payment.

(F) = Fidic

* At the Bucharest South Ring Road, interim payments have been made until the interruption of the work.
This time allocated to the checks carried out by the consultant with a view to certifying the quality of execution and obtaining the approval of the designer and the payment certificate delivered by the client may create some problems in terms of preserving the works with a view to carrying on the next execution phase. Another example consists in the occurrence of a period of high intensity rains, which haven’t been anticipated by the decision makers on the ground. Major deteriorations may appear, as illustrated in the images displayed hereinafter, which may compromise the work on long lengths, with large damages unforeseen in the initial cost of the work. In these situations, conflictual problems between the contracting parties may appear, as the remediation works are expensive, generally not covered by contractual clauses. These disputes subject to the arbitrage of competent fora are difficult to be imputed to the parties, as long as in the contractual clauses the clauses covering the risk factors in accidental natural actions are not stated. Equally, although the Constructor has the obligation, by technical regulations, to ensure the safeguard and preservation of the work during the works’ interruption, such as the period allocated to the Consultancy’s checks, the lack of funds aimed at this technological operation, generally ignored in the tender phase of the works, precisely for the purpose to win at the lowest price on the offer condition, makes the conflictual situation to be mutually imputed between the General Contractor and the damaged Subcontractor, obliged to redo the work on its own money. In disaster situations, such as the one presented in the current example, some subcontractors even go bankrupt, if they did not have the possibility to ensure their work at an insurance firm.

Therefore, through the present intervention, I consider adequate that a sub-clause of natural risk factors during execution should be popularized and actually imposed, in parallel with imposing contractual funds for the preserving and safeguarding the works carried out. Thus, the quality of the work can be safeguarded in the period of temporary interruption of execution for various reasons, generated by those involved in the Fidic-type Contract of Provision of Services. These contractual funds, which should be managed by the Client, recorded as various and unforeseen for the work launched at the tender, may be recorded with these types of events as precise destination, and it must be stressed that in the event they are not justified, they cannot be accessed by other types of works, but they will be returned to the guarantee fund.

Thus, it can be stated that the guarantee of the quality of the work during execution is being legislated, through the allocation of funds for safeguarding-preservation in duly justified cases, and would actually reduce the conflictual situations on the site of road transport infrastructures, many of which being generators of large financial losses as a result of delays and non-compliance to the execution chart.
Smart contracts and possible applications to the construction industry

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1. Introduction
The Final Report, an inquiry into Construction Industry Insolvency in NSW (Collins 2012), requested by the NSW Government in light of a number of mid-tier builder insolvencies in NSW and the knock-on effect on subcontractors, highlighted payments withheld or not paid, to be at the heart of the problem.
Uncertainties in payments leading to cash flow difficulties have been highlighted as a cause of business failures and escalating disputes in previous research (Carmichael, 2002; Carmichael and Balatbat, 2010). Not surprisingly, most of the 44 recommendations that the Final report put forward to the NSW Government were directly or indirectly related to payments.
In order to address the problem the Final Report proposed the creation of a „Construction Trust“, as pioneered by the Office of Government Commerce in the UK in 2011, which was described as having the following mission:

The Construction Trust: Any payment by a principal to a head contractor or by a head contractor to a subcontractor on account of, or in respect of, any work done or materials supplied by the head contractor, any subcontractor, sub whether as a result of a favourable adjudication under SOPA or not, shall be made and treated in the following way:

- such work shall be held on trust for the head contractor, subcontractor, sub subcontractor and supplier; and
- the head contractor, subcontractor, sub subcontractor and supplier;

The statutory Construction Trust requirement should apply to all building projects valued at $1,000,000 or more.

The statutory Construction Trust will be established for the purposes of paying the subcontractors and suppliers (Collins 2012, p. 355).

In its essence, the Construction Trust would hold payments in trust in order to safeguard and protect subcontractors and suppliers from a head contractor insolvency. The Construction Trust would guarantee that payments from the principal to the head contractor would follow through to subcontractors and suppliers, as the Trust mission clearly alludes to.

As a result of the recommendations put forward by the Final Report, the NSW Government made several changes to the Building and Construction Industry Security of Payment Act 1999. Unfortunately, the NSW Government decided not to implement the Construction Trust. The official NSW Government answer to the recommendation was:

Not supported at present time. The Government recommendation is to trial the use of Trust Accounts on selected government construction projects before consideration of wider application (NSW Office of Finance and Services 2013).

Understanding if trust accounts, or the Construction Trust, could make the construction industry more robust and reliable is beyond the scope of this paper, but we propose an alternative solution.

We believe that smart contracts can be used to create a contract that is „in the money“ (premise #1); as well as interacting between other contracts so that a trustful chain of payments can be established (premise #2); with the benefit of „speed of thought“ cash transactions.

The scope of this paper is to show that adopting smart contracts would yield the same benefits as implementing a Construction Trust proposed by the Final Report.

2. Quick introduction to smart contracts

Smart contracts were first mentioned in 1994 by Nick Szabo. Szabo envisioned the idea of embedding smart contracts in physical objects which he described as smart property. His example of choice was a car loan, writing that if you miss a car payment, the smart contract could automatically revoke your digital keys to operate the car.

Essentially, smart contracts are computer protocols that facilitate, verify, or enforce the negotiation or performance of a contract, or that obviate the need for a contractual clause (‘Smart Contract’ n.d).
The possibility to embed the terms and conditions of an agreement into a „physical” item differs immensely from a paper contract, which upon being signed off is often shelved, to be revoked later when the parties are in arrears.

Smart contracts allow for a set of instructions to be incorporated into a contract, and although smart contracts can probably be forgotten too, payments will be denied unless the contract agreed conditions are satisfied. In that sense, clauses in smart contracts are self-executing, self-enforcing, or both.

It goes without saying that smart contracts technology is still embryonic. Startups like ethereum.org, codius.org, counterparty.io, proofofexistence.com and so forth are empowering smart contracts technology, but they are not mainstream yet.

Nevertheless, as we shall show later in this paper, (1) the possibility to embed funds within a Smart Contract, and (2) the possibility to interlink different contracts in order to create a chain of events, such as payments, might well be what the construction industry has been craving for.

However, before we can move forward, we need to discuss and understand cryptocurrencies, as without this new form of paying for goods and services smart contracts would be sterile.

3. Quick introduction to cryptocurrencies

It is not a secret that although smart contracts were first discussed in 1994, it wasn’t until the recent development of cryptocurrencies, Bitcoin being the main example, that the true potential of smart contracts was unlocked. Before that, smart contracts were an interesting idea, but without a „smart” currency to back it up.

Everything changed with the creation of the blockchain, and the bitcoin. Since then all kinds of cryptocurrencies have emerged.

Essentially cryptocurrencies are a medium of exchange using cryptography to secure the transactions and to control the creation of new units (‘Cryptocurrency’ n.d.). Cryptocurrencies are often compared to digital currencies, an internet based medium of exchange.

Understanding how cryptocurrencies work, terminology such as „bitcoin mining”, or even the blockchain, is beyond the scope of this paper. However, basic knowledge is required in order to understand the benefits of cryptocurrencies and the applications to the construction industry.

Like smart contracts, the applications and ramifications of cryptocurrencies are still embryonic, but for the purpose of this paper we are only interested in two features; (1) the possibility to write instructions in „digital coins” and (2) the „speed of thought” at which cryptocurrencies are transacted between parties.

As we shall see, these two features are what set cryptocurrencies aside from traditional forms of money such as coins, or cheques. Combined with smart contracts, cryptocurrencies can guarantee and create a chain of payments way beyond what the construction industry has seen so far.

4. How smart contracts could be used in the construction industry

As so often happens in the construction industry, the principal puts together a set of drawings, specifications, and other relevant documents in order to tender or negotiate a particular scope of work. Eventually, a contract is signed with a builder, sometimes a letter of intent will suffice, sometimes not even that, to carry out the works in exchange for a sum of money.
Once the contract is signed, the head contractor breaks up the scope of works in trades and signs various sub-contracts to perform the works. There are situations where different arrangements are made between principal and head contractor, head contractor and subcontractor, but at the end of the day, any time construction work has been carried out, a bill will be presented for a party to pay.

Payments withheld or not paid at all, as discussed at the beginning of this paper, most likely puts several parties on the brink of bankruptcy.

But what if the principal could embed the contract sum in a construction contract? And we literally mean embed money into the contract. We believe this would give a sense of security to all the parties involved in the project and protection against insolvency. This is what we would like to call a construction contract that is „in the money”.

As mentioned before, instructions can be added to cryptocurrencies. The principal, if using a smart contract, is entitled to embed digital currencies into the contract together with a number of conditions that have to be fulfilled for the head contractor to be paid. The payment is already embedded in the contract. The head contractor only needs to deliver their scope of works.

Smart contracts together with cryptocurrencies would allow for the drafting of contracts with embedded funds in order to protect head contractors, subcontractors and suppliers against the insolvency of the principal or late payments. It goes without saying that the same technology can be employed in contactors between head contractor and subcontractor, subcontractor and suppliers, subcontractors and labourers.

But the benefits to the construction industry of smart contracts, or contracts „in the money” don’t stop here. Smart contracts can also be linked together. This means that a simple payment to the head contractor could carry instructions for a percentage of such payment to follow through to another contract.

In other words, contracts related to the same project, but between different parties, could be linked together in order to create a web of payments. Payments can be self-executable and self-enforceable, only dependent upon the execution of the works as per the contract conditions.

In summary, together with the possibility to embed funds within the main contract, we believe that adopting smart contracts in the construction industry would offer the same benefits as the creation of a Construction Trust. Overall, smart contracts can:

(1) guarantee that the required funds to carry out the construction works would be available to finance the project;
(2) protect head contractors, subcontractors, and suppliers from withheld or late payments; and
(3) safeguard the various parties involved in the project from the insolvency of one party.

Further to the benefits mentioned above, payments between parties would also occur at the „speed of thought”, eliminating many of the cashflow issues often experienced by companies operating in the construction industry.

Going forward, we would like to recommend the creation of a smart contracts committee in order to explore, research, and test the implementation of smart contracts in the NSW construction industry.
5. Barriers to the implementation of smart contracts within the construction industry

Smart contracts as well as cryptocurrencies are not mainstream yet. In the particular case of bitcoin, a report carried out by Deloitte (Deloitte 2014) highlighted the need for stability, acceptance and trust for the digital currency to go mainstream. Smart contracts are not any different. Overall, the technology still has a long way to go before it can convince the various parties involved in the construction industry that it’s fit for purpose.

Furthermore, the construction industry already has a reputation for being slow at implementing technology in its operations and learning how to use smart contracts and cryptocurrencies is not something that can be learned overnight. Nevertheless, the premise of potentially solving the construction industry’s high rate of insolvencies and payment issues in the construction industry, is a premise worth fighting for.

6. Conclusion

The Final Report requested by the NSW Government to identify the cause of insolvency in the construction industry proposed the creation of a Construction Trust to guarantee payments between the various parties involved, mostly subcontractors and suppliers. The NSW Government made amendments to the legislation but decided not to implement the creation of the Construction Trust.

This paper proposed that smart contracts combined with cryptocurrencies allow for the encryption of funds within a construction contract as well as interconnection between other contracts in order to secure payments. These two features, if implemented correctly, would offer the same benefits as proposed by the Construction Trust.

This paper recommends the creation of a NSW committee to explore, research, and test the implementation of smart contracts in the construction industry. Although smart contracts technology is still embryonic, the opportunity to protect the various parties from insolvencies and late payments might be what the construction industry has been craving for.

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SCL 2016
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GENERAL INFORMATION

International Networking Initiative

Delegates from several countries are expected to attend SCL 2016 and organization of specific events (pre conference events, breakfasts and meetings) will be organized. International Networking Initiative groups already established are China, Germany, Japan, Korea, UK and USA. Other networking groups will be created and informed in due course.

Travel information

Please send an e-mail to Travel SCL 2016: travel@scl2016.ro
- for any travel and hotel reservation request, including at the Unique Hotel; and
- travel packages regarding traveling to São Paulo for the SCL 2016 and to Washington, DC for the IBA Annual Conference 2016 (Sep 18-23, 2016).

International Arbitration Workshops and Examinations in São Paulo (Pre SCL 2016)

The Chartered Institute of Arbitrators (CIArb) will be offering International Arbitration Accelerated Route to Membership and Accelerated Route towards Fellowship courses in São Paulo this September. With the support and cooperation of the Center for Arbitration and Mediation of the Chamber of Commerce Brazil-Canada (CAM-CCBC) the courses will consist of both workshops and examinations. Both courses will take place the week before the Sixth Society of Construction Law International Conference 2016 (SCL), on Accelerated Route to Membership: 5-6 September 2016; and Accelerated Route to Fellowship: 8-10 September 2016.

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Comparative view of risks’ allocation in a FIDIC contract [*Red Book*] and the Romanian construction agreement

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An important aspect considered by the parties when deciding on a form of contract is related to allocation of responsibilities and risks\(^1\). In this paper, we will try to present, comparatively, the allocation of risks in the FIDIC Red Book\(^2\) and the Romanian construction contract by pointing out several of the key responsibilities of the parties and their related liability. We will refer strictly to Red Book General Conditions and to Romanian general legal provisions since, through the use of Particular Conditions, respectively based on specific clauses, valid under Romanian laws.

\(^1\) Different criteria of risk allocation have been identified by researchers and practitioners, as follows: (a) the fault-standard: the cost and time impacts caused by the fault of a party should be borne by that party, (b) the foreseeability standard: the party that is best able to foresee the risk should be allocated that risk, (c) the management standard: the party that is best able to control and manage the risk should be allocated that risk and (d) the incentive standard: risk should be placed on the party most in need of incentive (presumably already with the ability) to prevent and control it. For further details on this topic, please see Nael G. Bunni, *The FIDIC Forms of Contract – Third Edition*, Blackwell Publishing, UK, 2005, pages 101-104.

\(^2\) Red Book is the „traditional“ FIDIC contract, suited for civil engineering and infrastructure projects [since the design is provided by the Employer] and not for contracts where major items of plant were manufactured away from site. We have chosen the Red Book since we consider it to be the closest type of FIDIC contract to the Romanian construction contract [where, if not otherwise agreed upon by the parties, the Employer will provide the design and technical details of the project].
1. The management of the contract
In a global overview, the parties in a construction contract [irrespective if a Red Book or a contract regulated by the Romanian laws] have the same main obligations. Differences appear in relation to the manner such obligations are carried out. We will try to analyze herein below those obligations that may allow us to observe the differences and similarities of these two contracts screened in this study.

1.1 Issuing instructions to the Contractor
Under Romanian law (article 1876 (2) of Civil Code), after inspecting the site, Employer will communicate to Contractor his observations and instructions related to: (i) the status of the works, (ii) the quality and the features of the works and materials used thereto and (iii) the observance by the Contractor of its contractual obligations. Since, under Romanian provisions, the Contractor is seen as „the expert in construction” and, therefore, is required to perform the works in an independent manner and on his liability, the interference of the Employer should be minimal. Thus, we agree that any of the Employer’s instructions should be issued exclusively for the matters that may be checked-out by the Employer [listed above] and cannot relate to other outside aspects that should remain at Contractor’s choice. In addition, we would like to point out that Civil Code is silent on the sanctions applicable to the Contractor in case he fails to comply with Employer’s instructions. Our view on this topic is that, the non-observance of the instructions received from Employer cannot, by itself, trigger the liability of Contractor [except when this liability is expressly stipulated in the contract]. On the other hand, if Contractor fails to observe the quality requirements or other aspects of the works, by not complying with the instructions received from Employer, Contractor will be in breach of the contract. Therefore, Employer’s instructions stand as recommendations, imposing no imperative obligations to Contractor. This conclusion results also from the obligation of the Contractor to inform the Employer in case „the execution, the durability or the use of the works are endangered by Employer’s inadequate instructions” (article 1858 (b) of Civil Code).

On the other side, Red Book offers the solution of an Engineer to act for the Employer and to issue instructions to the Contractor. Different from the above Romanian legal provisions, Engineer’s instructions are mandatory for Contractor, who is in breach of the contract for not complying therewith. The Engineer is furthermore authorize to give instructions “on any matter related to the Contract” and not only in relation to certain specific matters, as provided by the Romanian law.

1.2 The role of the Engineer
Considering that the presence of the Engineer is a specificity of the Red Book, several aspects related to his role are of particular relevance, as follows: (i) the Engineer is not a party to the contract...
and, consequently, he is not allowed to amend it, (ii) even if the Engineer represents the Employer, he is expected to act as an independent third party and, in many aspects, he is required to give impartial decisions, (iii) any action of the Engineer “shall not relieve the Contractor from any responsibility he has under the contract, including responsibility for errors, omissions, discrepancies and non-compliances” (clause 3.1 (c) [Engineer’s Duties and Authority]) and (iv) the Engineer is liable only towards Employer; should Contractor suffer any loss or damage due to the Engineer negligence or decisions, he can obtain remedy only against the Employer, based on the provisions of the Red Book, and not directly from the Engineer.

Under the Romanian construction contract, the performance of works involves [most of the time and depending on the specificities of works], the participation of designers, architects, engineers and/or technical advisers. These “additional experts” are chosen either by the Employer, or by the Contractor and their specific role and liability in relation to the works are detailed in separate contracts. However, the allocation of risks between the Contractor and the above “additional experts” may be confusing [the distinction between the responsibilities of each party is not clearly made by the legal provisions and, thus, such responsibilities may interfere and overlap] and difficult to handle in practice [each party should prove that the defect was not caused by his contribution to the works]. From this perspective, the presence of a single main professional – the Engineer – to have a general overview over the works and to act as a “guarantor” for their qualitative and timely execution seems a more efficient solution.

1.3 Procurement of materials

As a general rule under Romanian construction contract, Contractor performs the works with its own materials (article 1.857 of the Civil Code). This rule implies that Contractor (i) shall be held liable for the quality of the materials and (ii) will suffer the risk of loss or damage of such materials (“res perit domino”), until works are commissioned [except for the case such loss or damage is caused by Employer]. The ownership right over materials shall pass from Contractor to Employer together with the works that incorporate them, at commissioning. The parties may contractually agree that Employer will provide the necessary materials and, in this case, Employer will suffer the risk of their loss

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9 For example, when making determinations (as per clause 3.5 [Determinations]), the Engineer “shall consult with each party in an endeavor to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the contract, taking due regard of all relevant circumstances”.

10 This means that, despite the presence of the Engineer’s professional expertise, the Contractor [who should be also an expert in construction field] preserves his liability for the manner works are performed.

11 This limitation results from the principle of privity of contract, which states that a contract cannot confer rights or impose obligations arising under it on any person or agent except the parties thereto. In our case, the Engineer is not a party to the Red Book, but has a contract executed with the Employer.

12 Red Book does not exclude the presence of designers and architects, beside the Engineer.

13 Law no. 10/1995 (on the quality in construction) regulates the responsibilities of each of the parties involved in a construction project: designers, investors, contractors, technical experts, etc.

14 Thus, for example, the Contractor shall not be liable for the defects that are proven to come from deficiencies of the expertise or plans provided by an architect and/or engineer chosen by the Employer (article 1.879 of the Civil Code). In case of disputes, the courts of law will decide on the liability of each of the parties involved in the construction process.

15 Under the Romanian construction contract, the Contractor assumes some of the roles of the Engineer and, consequently, bears a higher degree of liability as opposed to the Contractor in the Red Book.

16 For a more detail study on the liability of the Contractor for the materials, under Romanian legislation, please see Codruta Mangu, „Asset risk and contract risk in construction contract”, Bucharest, Pandectele Romane Legal Review no. 1 dated 31 January 2012.
or damage, by causes non-imputable to Contractor\textsuperscript{17}. In addition, Contractor will not be held liable for the defects attributable to the materials procured by Employer, except for the case Contractor fails to inform the Employer that such materials may affect the performance or the durability of the works, or the utilization thereof according to their destination (articles 1.879 (4) and 1.858 of Civil Code)\textsuperscript{18}.

Under the Red Book, it is also the Contractor that has to procure the materials. However, such obligation is regulated differently, as compared to the Romanian provisions, since: (i) the Contractor shall submit samples of the materials ("manufacturer's standard samples") for Engineer’s approval, prior to their use for the works\textsuperscript{19}, (ii) Employer’s personnel shall be entitle, at all reasonable times, "to examine, inspect, measure and test the materials" (clause 7.3 [Inspection]) and (iii) the ownership over materials shall pass to Employer "at whichever is the earlier of the following times: (a) when it is delivered to the site or (ii) when the Contractor is entitled to the payment of the materials" (clause 7.7 [Ownership of Plant and Materials]). Such provisions have the effect of mitigating Contractor’s liability for the quality of the materials and works\textsuperscript{20}.

1.4 Commissioning of the works

In both contracts, Contractor shall be fully responsible for the care of the works until commissioning thereof, when the risks shall pass to Employer. Contractor shall be exempted from liability if he proves that loss or damage of the works was caused by (i) the Employer or a fortuitous event (according to Romanian provisions) or (ii) any of the events listed as "Employer's risks" under clause 17.3 of the Red Book, as detailed below, in the section dedicated to the "Risk of contract". After commissioning, Contractor shall continue to be liable for the remediation of the defects of the works.

Under Romanian legal regulations, the commissioning of constructions has to observe a standard procedure\textsuperscript{22} consisting of two stages: (i) a commissioning upon completion of the works, that must be attended by a representative of the public authority that issued the building permit and (ii) a final commissioning, upon the expiry of the guarantee term agreed contractually. Problems appear in case Employer refuses to set-up the commissioning or fails to attend such commissioning \textsuperscript{23}. In such cases, the Contractor can transfer the risks to the Employer only by serving the latter a notice of delay in relation to his commissioning obligation\textsuperscript{24}.

The Red Book provides a similar two stage commissioning procedure but, unlike the Romanian regulations, it sets a stricter time frame for the parties to comply with their commissioning obliga-

\textsuperscript{17} The sole obligation of Contractor, in case materials are procured by Employer, is to keep them in good condition and to use them according to their destination and technical rules.

\textsuperscript{18} For more details on the Contractor’s obligation to inform the Employer on different aspects that may affect the works, please see Cornelia Popa and Cornelia Tabirta, „New perspectives on the liability of the contractor as per the Civil Code”, Bucharest, Romanian Review of Business Law no. 2 dated 29 February 2013.

\textsuperscript{19} According to FIDIC Contracts Guide – First Edition 2000, under the Red Book, the Engineer is not empowered to relax the provisions of the contract. If he consents to the use of materials, which are subsequently found to be hazardous, the Contractor will be in breach of clause 7.1 [Manner of Execution] and will have to replace those materials.

\textsuperscript{20} According to FIDIC Contracts Guide – First Edition 2000, the change in ownership does not depend upon the Contractor having received payment in full, but upon the date he is entitled to payment.

\textsuperscript{21} The inspections, measurements or tests performed by the Employer’s personnel shall not relieve the Contract from any obligation or responsibility. The Contractor shall still take full responsibility for the care of the works and, implicitly, for the care of the materials to be used therefor (according to clause 17.2 [Contractor’s Care of the Works]).

\textsuperscript{22} Such procedure is regulated by Governmental Decision no. 273/1994 (on the approval of the commissioning regulation for construction works and related plant) and is applicable to constructions carried out on the basis of a building permit; for the other construction, the commissioning is made according to the rules agreed by the parties.

\textsuperscript{23} In case the Employer refuses to set-up the commissioning of the works, the Contractor has the possibility to summon the commission members and to fix the commissioning date, informing, in due time, the Employer on such date.

\textsuperscript{24} The notice of delay consists of either a written notice to be served, preferably through a bailiff [or by other means that ensure the proof of reception] or a claim submitted to a court of law (article 1.522 of Civil Code).
tions and mechanisms for solving the issue of parties’ passivity. Thus, for example, the Taking-Over-Certificate is considered “tacitly issued” in case the Engineer fails either to issue it or to reject the Contractor’s application for commissioning within the term of 28 days (pursuant to clause 10.1 [Taking Over of the Works and Sections]). Such a solution sanctions the passivity of the Engineer and has the role to determine the follow-on of the commissioning procedure. In addition, prior to commissioning, Contractor shall carry out the tests specified in the contract [depending on the type of the works]; such tests may reveal the defects of the works that have to be remedied by Contractor until commissioning.

2. Risk of contract

As seen above, a party is liable and has to indemnify the other party in case such party fails to perform any of his obligations, or performs such obligations in an inappropriate manner. Differently, the question of the risk appear if an extraordinary event, beyond the parties’ control, impedes a party to [continue to] perform any of his obligations; in such case, it is to decide which of the parties will suffer the risk.

2.1 Allocation of risk between the parties

The rule under Romanian legislation is that the risk of contract is suffered by the debtor of the obligation impossible to perform ("res perit debitorti"). Thus, for example, if, before commissioning, the works are affected by earthquake, Contractor shall have to restore the works on his cost, according to the initial plans and for the same initial price [that shall be paid only if works are commissioned]. On the other hand, since earthquake is considered a force majeure event, Contractor shall be exempted from liability and, consequently, shall not pay damages to Employer for the prejudice caused thereto [for example, as a result of a delay in completion of works]. Nevertheless, if Contractor (i) was in default with his commissioning obligation and (ii) was served a notice of delay in this respect, before earthquake, the Contractor will have to compensate the Employer for the prejudice caused by the loss or damage of the works, unless Contractor proves that such loss or damage would had happened even if the works had been handed over to Employer on time. In case materials have been procured by Employer, the latter will suffer the risk of their fortuitous loss or damage ("res perit domino") and will have to procure new materials to the Contractor (article 1.860 of Civil Code).

The Red Book’s perspective is significantly different on this topic since the risk of contract is divided between Employer and Contractor. The first rule is that Employer will suffer the risk of contract in relation to the events listed in clause 17.3 [Employer’s Risks]. Such events include several of the force

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25 The parties of a Red Book contract have to comply with the Romanian compulsory commissioning procedure [despite the procedure provided under the Red Book] if the contract is governed by Romanian law or the works are performed in Romania. In the absence of a protocol executed according to Romanian commissioning procedure, the construction cannot be recorded with the relevant land book and, consequently, it does not exist from a legal perspective [according to article 36 (1) of Law no. 7/1996 of cadastre and real estate publicity, the ownership over a construction is registered with the land book based on (i) the building permit, (ii) the commissioning protocol [signed by the representative of the public authority that issued the building permit] and (iii) the relevant cadastral documentation].

26 The Civil Code defines two (2) extraordinary events that exempt a party from liability: (i) force majeure, which is an external event, absolutely imminent and invincible [for any person] and (ii) fortuitous case, which is an event that cannot be foreseen or prevented by the party called to fulfil the obligation. For further details on this topic, please see: Liviu Pop, Ionut-Florin Popa and Stelian Ioan Vidu, Treaty on civil law – Obligations, Universul Juridic, Bucharest, 2012, pages 443-445. Red Book defines only force majeure as an event: (a) which is beyond a party’s control, (b) which such party could not reasonably have provided against before entering into the contract, (c) which, having arisen, such party could not reasonably have avoided or overcome, and (d) which is not substantially attributable to the other party” (clause 19.1 [Definition of Force Majeure]).

27 For a detailed presentation of this rule, please see the paper of Mr. Gabriel Tita-Nicolescu, „The contractual risk in the New Civil Code” published by Studia, Babes-Bolyai University - http://studia.law.ubbcluj.ro/articol.php?articolId=505.
majeure events listed in clause 19.1 [Definition of Force Majeure] and events attributable to the Employer. If any of the Employer’s risks materializes, the Employer shall: (i) offer to Contractor an extension of time, if completion will be delayed [the extension of time is under Engineer’s determination], (ii) pay the costs incurred by Contractor from rectifying the loss or damage and (iii) pay the „reasonable profit on the cost” - only if the loss or damage was caused by the Employer, namely by: „(i) use or occupation by the Employer of any part of the permanent works, except as may be specified in the contract and (ii) design of any part of the works by the Employer’s personnel or by others for whom the Employer is responsible”.

The second rule under the Red Book is that the Contractor shall suffer the risk of loss or damage of works caused by any risks that not fall under Employer’s risks. Thus, for example, the Contractor shall suffer the risks coming from: (i) natural catastrophes which are foreseeable to an experienced Contractor by the date for submission of the tender or against which an experienced Contractor could reasonably have been expected to have taken adequate preventative precautions, or (ii) physical conditions that could have been foreseen (clause 4.12 [Unforeseeable Physical Conditions]). In the above examples, Contractor will suffer the risks since he is deemed to have foreseen and assumed such risks. Thus, in the light of Red Book’s provisions, in our example above, if earthquake damages the works before commissioning, it is the Contractor who will incur the costs for repairing such damages [similar to the Romanian regulations], only if the works are performed in an area with seismic activity that could have been reasonably foreseen [for example, based on statistic frequency or historical records]. Otherwise, the earthquake will fall under Employer’s risks.

From a comparative view with the Romanian regulations, the following aspects of Employer’s risks are of particular interest: (i) the use or occupation of the works by the Employer before commissioning triggers a transfer of risks to the Employer, different from the Romanian legislation that fails to expressly regulate such situation and (ii) the division of the risks triggered by the force majeure events between the parties of the Red Book, unlike Romanian construction contract where damage or loss caused by any of the force majeure events is fully attributed to Contractor.

### 2.2 Remedies for the case when works performance becomes impossible

The remedies provided in case the performance of works is prevented by an extraordinary event are different. Thus, under the Romanian provisions, (i) if performing the works becomes definitely impossible for Contractor, under any circumstances [the impossibility is „total and final”], the contract shall be terminated ope legis, as of the occurrence of the fortuitous event, no formality being required, while (ii) if such impossibility to perform the works is temporary, Employer has the possibility to either suspend the execution of his [payment] obligation, or terminate the contract (article 1.557 of the Romanian Civil Code).

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28 According to FIDIC Contracts Guide - First Edition 2000, the examples of force majeure events listed in clause 19.1 are comparable to the risks listed in clause 17.3, but amended as appropriate to reflect the constraints imposed by the definition of „force majeure”. In addition, the events of „force majeure” listed by clause 19.1 are not limitative, since, subsequently, clause 19.4 [Consequences of Force Majeure] requires the event to be „of the kind” described in [the illustrative examples of] clause 19.1.

29 The Civil Code provides the obligation of the Employer not to disturb the activity of the Contractor, with no sanction attached. However, it may be inferred [based on the general liability provisions of the Civil Code] that, if the Employer uses or occupies the works prior to commissioning and this action causes damages or loss to the works, the Employer will be liable to repair the damage and will suffer the repair costs.

30 Romanian legislation confusedly uses „fortuitous event” beside the defined terms: „force majeure event” and „fortuitous case”. By reading together article 1.557 and article 1.634 of Civil Code [both articles refer to the general rules applicable to obligations that are impossible to perform], we may conclude that „fortuitous event” means a force majeure event, a fortuitous case and other similar events [terminology which is again rather confusing]. For details, please see: Liviu Pop, Ionut-Florin Popa and Stelian Ioan Vădu, Treaty on civil law – Obligations, Universul Juridic, Bucharest, 2012, pages 322-326.

31 This rule gives effect to the legal principle „ad impossibilium, nulla obligation”. However, in practice, there are few cases when, due to a force majeure event, the performance of the works becomes definitely impossible for the Contractor.
Civil Code). Such regulations put forth the following issues that should be contractually addressed by the parties: (i) the assessment of the impossibility to perform the works as being „total and final” or temporary [for the case the parties have different views], (ii) the proof of contact’s termination in the event it terminates ope legis and (iii) the remedies applicable in case the Contractor can no longer perform part of the works.

The Red Book seems to offer remedies equitable for both parties, since any of the parties may terminate the contract [by serving a notice to the other party], for reason of force majeure, in case „the execution of substantially all the works in progress is prevented” (i) for a continuous period of 84 days or (ii) for multiple periods which total more than 140 days (clause 19.6 [Optional Termination, Payment and Release]). Consequently, the contract cannot be terminated by any of the parties in case performance is partially prevented or is prevented for a shorter period of time than the one expressly mentioned. Another difference of perspective refers to the payments that have to be made following the termination of the contract as a result of force majeure. While Red Book clearly lists the amounts that have to be established by determination of the Engineer (clause 19.6 [Optional Termination, Payment and Release]), the Civil Code offers flexibility to the parties to contractually agree on the amounts payable if such termination occurs.

### 2.3 Remedy of the defects

After the commissioning of the works upon completion, both contracts stipulate a guarantee term during which Contractor will have to remedy the defects of the works or to complete the outstanding works mentioned in the commissioning protocol. Under the Red Book, such term is of maximum two (2) years, while the parties to the construction contract regulated by the Romanian law may agree any guarantee term. To this guarantee term, Romanian law adds a supplementary guarantee period (i) for the hidden (latent) defects of the construction – ten (10) years computed as of the commissioning thereof, and (ii) for defects of the construction’s main structure - for the entire existence of the construction.

In relation to the guarantee term provided under both contracts, we deem the following matters are of relevance: (i) the Contractor, under Romanian legislation, is liable for both, the defects and the quality of the works (article 1.863 of Civil Code), unlike Red Book where, as a result of (a) materials’ samples prior approval by the Engineer and (b) the inspection and tests carried out prior to commissioning, Contractor is no longer liable for the quality of materials and works and (ii) defects, under

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32 It is the Contractor that has to prove [with any type of proof] that the works can no longer be carried on and such impossibility is not only temporarily (article 1.634 (4) of Civil Code). In case Employer has a different view, the competent court of law will decide on the nature of the impossibility to perform the works.

33 Under the provisions of article 1.634 (5) of Civil Code, Contractor would be required to notify the Employer the existence of the event that leads to his impossibility to perform the works. Thus, we are of the view that in case the Contractor cannot continue performing the works, he should serve the Employer a written notice [accompanied with relevant proves of the event causing the impossibility, if such event requires proves] stipulating that the contract was terminated at the date of the fortuitous event [the exact date should be mentioned], according to the provisions of the Civil Code. In this way, the parties will have an evidence of contract’s termination, which may be necessary, for example, for de-registering the Contractor’s mortgage for the payment of the price from the land book or for the financial/legal audit of any of the parties.

34 The Civil Code omits to regulate the situation when the Contractor cannot continue to perform part of the works; in this case, depending on the importance of this part for the entire works, the contract will either terminate ope legis, or will continue and the remaining part of the works shall be performed, with a proportionate reduction of the price initially agreed by the parties.

35 Such amount includes the price reduced proportionally with the works performed until the date of the force majeure event.

36 In practice, such term is either of one year or of two years, depending on the extent of the works.

37 According to article 29 of Law no. 10/1995 on the quality in construction (as further amended and supplemented). If Red Book is to be governed by Romanian law, these additional guarantee periods [which are set forth by compulsory legal provisions] shall apply.

38 Following the testing of the materials, the Engineer may instruct the Contractor to remove or replace any material which is not in accordance with the contract [at this stage of tests and not within the guarantee term] - clause 7.6 [Remedial Works].
Romanian law, are divided between (a) latent defects, for which Contractor is always liable and (b) patent defect that must be notified by the Employer at commissioning in order to trigger the obligation of the Contractor to repair them, whilst Red Book uses a general and large phrasing – „defects or damages as may be notified by the Employer” (clause 11.1 [Completion of Outstanding Works and Remediining Defects]).

The cost of the repairs shall be borne by Contractor to the extent that: (i) the works are attributable to: „(a) any design for which the Contractor is liable, (b) plant, materials or workmanship not being in accordance with the contract or (c) failure of the Contractor to comply with any other obligation” (clause 11.2 [Cost of Remediining Defects]), or (ii) Contractor is not exempted from liability by proving that the defects have resulted from: (a) Employer’s decisions on soil, materials, sub-contractors, experts or building methods [except for the case such defects could have been foreseen while performing the works and the Contractor failed to notify them to the Employer] or (b) deficiencies in the reports or plans provided by Employer’s architect or engineer (article 1.879 of Civil Code).

3. Conclusions

The essential difference between these two contracts [Red Book and Romanian construction contract] consists of the fact that Red Book is a standard contract of common-law inspiration, widely known by practitioners [this aspect implies a better communication of parties coming from different countries and reduces the costs of negotiation], while the Romanian construction contract has no standard form, being governed by several legal principles [stipulated in the Civil Code, the additional specific construction legislation and other enactments governing certain of the parties’ obligations] that entails both flexibility [which may also trigger ambiguity] and need for a thorough knowledge of Romanian legislation. As seen above, this key difference is reflected in the manner parties share duties and liability, in the sense that Red Book provides a more balanced allocation of risks between Contractor and Employer, whilst the Romanian construction contract focuses on the liability of Contractor, placing a higher pressure on him. At the core of the Romanian different legal approach, stands the presumption that, most of the times, the Contractor is (or should be) better informed of the actual status of the site and of the works and, bearing in mind his professional background, he has the know-how required to foresee and, if possible, to prevent any risks and adverse events, rather than the Employer who generally lacks such background. However, in the end, the risks sharing rules agreed by the parties [either by applying the solutions laid down by the Romanian legal provisions or by FIDIC Red Book, or by creating new contractual mechanisms] are the key to an efficient management of contract.

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11. Governmental Decision no. 273/1994 regarding the approval of the commissioning regulation for construction works and related plant (as further amended and supplemented)
Statute of limitation in FIDIC contracts concluded in the public procurement procedures

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For major infrastructure projects in Romania which are awarded under the a public procurement procedure, the recommendation of the EU Commission was for the usage of the FIDIC General Conditions of Contract (hereinafter FIDIC GCC). They were also included as part of the Romanian internal legal system under the provisions of several normative acts issued by various institutions1. Such implementation included, beside the main General Conditions and Special Conditions, additional clauses related to the adjustment of these general documents to the specifics and requirements of Romanian Contracting authorities. There could be a separate debate on whether or not such adjustments were for the benefit of the projects – being quite generally admitted that they affect the initial FIDIC intention to balance the parties’ position in such contracts, by imposing a more onerous position on Contractors and less liabilities on the Employer/Contracting Authority, but this exceeds the purpose of this article.

It is just to be pointed out that most of the infrastructure projects awarded by Romanian Contracting Authorities are based on the FIDIC principles and as such the issues related to the statute of limitation are of significant importance for the Contractors and Employers alike being known that disputes arisen shall be settled considering not only the FIDIC principles but also the principles applicable in Romanian law.

1 ANRMAP Order 132/2012, Government Decision no 1405/2010 and Ministry of Transportation Order 146/2011, all related to the implementation of Red and Yellow Fidic Conditions of Contract for the infrastructure projects in Romania.
1. Public Procurement Contracts – Administrative Contracts

Under the provisions of the relevant applicable law Emergency Government Ordinance no 34/2006 on awarding the public procurement contracts, the public concession contracts and public services concession contract (hereinafter referred to as EGO 34/2006) as further amended it is stipulated that the public procurement contract is “assimilated to an administrative act”. This legal provision does not help the works of the practitioners as far as it is not a clear classification of this type of contracts as administrative contracts.

The administrative act is from a legal point of view as a matter of principle an unilateral act, an act issued by an administrative authority imposing rights and obligations on a third party - the recipient of such act. Or in the case of a contract, the theory of the law mentions that this is a bilateral act establishing rights and obligations incumbent to all of its party. Therefore, whilst the authors are quite unanimous in including the public procurement contract within the category of an administrative contract the issue is, in our opinion, far to being solved considering the theoretical, at least, difference and consequences of it as mentioned above.

The controversy as to the legal nature of a contract concluded under the public procurement procedures i.e. civil/commercial contract or administrative one derives from several contradictory court decisions – including decisions from the Supreme Court of Romania - where this matter is differently argued, treated and settled.

Another cause of such non-consistent approach of the legal nature of the Contract is the fact that the law on public procurement had undergone several modifications mostly related to the competent courts on public tender procedures and contracts signed on the basis of such procedure that have triggered also the nature of the contracts and it is not yet clarified.

At the date hereof the same law provides that the litigation related to the performance, nullity, annulment, termination, cancellation or unilateral termination of the public procurement contract is under the competence of the Administrative and Fiscal Litigation Division of the tribunals where the contracting authority is located.

The parties may agree that litigation related to the performance of the public procurement contracts may be entrusted also to arbitration. As it is well known and it was discussed by authors in the field of arbitration, the relevant texts of OUG34/2006 suffered several modifications in this respect and thus the jurisprudence is not consistent with a certain solution. Neither the jurisprudence of the Arbitration Court attached to the Romanian Chamber of Commerce and Industry nor the jurisprudence of the state courts. As it was detailed in a specific article the solutions given to the issue of the competent court are disputable and they are not in line with the various and successive modifications of the EGO 34/2006. Therefore suggestions were made for a coherent and sustainable modification of the relevant text.

Whether the public procurement contract is an administrative contract or a civil contract and to what extent it is relevant for issues related to time limitation. There might be different implementation and different time limits to be considered in this respect.

2. Applicability of the time of limitation provided in Article 11 of Law 544/2004

Therefore, is the 6 months time limitation period provided in art.11 of Law 554/2004 on administrative judicial procedures (hereinafter referred to as Law no 554/2004) applicable to any claim deriving out of the public procurement contract based on the FIDIC GCC?

2 Published with Official Gazette no 418 of 15.05.2006
3 Article 3 letter f) of EGO 34/2006
4 Article 286 of EGO 34/2006
5 Article 288 index 1 of EGO 34/2006
A final answer to this questions has not been given by the judicial practice in Romania. Various approaches to the settlement of disputes procedure where considered on this aspect, that very important for Contractors when filling claims under the provisions of Clause 20 of FIDIC GCC.

In a very strict approach for any administrative contract or act, the time limit to be considered for filling a court claim is of 6 months from the date of the minute of conciliation or, if no minute of conciliation was signed or entered into, the 6 months should be counted considering:

- Conclusion of the Contract in case of disputes related to its conclusion;
- Amendment or of the refusal to amend the contract in case of disputes related to the modification of the contract;
- Alleged breach of the contract in case of disputes related to the breach of the contract;
- Termination or of the alleged causes triggering termination in case of disputes related to termination of the contract.

The aspects mentioned above should be construed in the context of the specific provisions of FIDIC Contracts which provide a specific two tier dispute resolution mechanism, based on claims filled by the contractors within the frame of the provisions of Sub-Clauses 3.5 [Engineer determination] and 20.1 [Contractor’s Claims].

In the situation of a \textit{stricto sensu} interpretation of the obligation to bring the claim to the court within 6 months time limit it is difficult for Contractors to comply with this 6 months period, as far as the claim is following the contractual path agreed.

A second question is whether or not an Arbitral tribunal entrusted with the settlement of a claim under the dispute resolution mechanism shall not consider the 6 months period of limitation? Is this applicable to the cases when the parties have chosen the arbitration as dispute settlement procedure or only for the cases when the parties have not agreed to submit their disputes for resolution to arbitration, but to the public state courts?

These aspects may put in a total different light the dispute settlement mechanism under the public procurement contracts „assimilated to administrative acts”.

In our opinion the time limitation period provided for in article 11 of the Law no 544/2004 should not apply for public procurement contracts concluded on the basis of FIDIC GCC.

One of the arguments for this opinion is related to the main principle related to the theory of administrative jurisdiction. An usual administrative litigation related to an act expressing the decision of the public administration authority by which the public interest is implemented. Whilst then main reason of the public administration is represented by issuance of administrative acts under which the enforcement of the law is made either in general or in particular, a dispute having as object an administrative act is not triggering the private interests of the parties, but the way of exercising of the competencies of the public authorities as subjects of public law. Consequently it is natural that such conflict, to be settled by the courts and to trigger the public order, which obviously claims for Any disputable aspect related to the legality of an administrative act triggers a dispute as regards the legality principle itself. By contrary, in case where the dispute is related to a construction contract one does not challenge the authority powers of the Employer, but merely its way to implement and understand a factual situation and the rights and obligations related to other activities than these related to the implementation of the law. In this light, in our opinion it is obvious that the provisions related to the settlement of disputes in the EGO 34/2006 shall prevail and supersede the provisions of article 11 of Law 554/2004 since the interests protected by that specific law would not apply in this case.

Another the argument for our opinion is related to the text of the article referring mainly to the annulment of the administrative act or contract, acknowledgement of the right claimed or damages. Or, for the most cases, a Contractor’s claim under a FIDIC GCC would have other object than annulment of the contract but merely the claim has as object either extension of time or monetary
compensations related to a contract which is valid and recognised as such by the parties. Usually annulment or nullity of the contract for causes related to its awarding is requested by other participants to the tender procedure and this case obviously fits for the case detailed in article 11 of the Law no 554/2004 corroborated with the provisions of article 287 of EGO 34/2006 where the cases for nullity of the contract are detailed and the potential solutions of such a claim are detailed.

On the other hand article 11 of the Law no 554/2004 impose a „conciliation procedure” for administrative contracts and the time limit of 6 months is running from the moment when such conciliation minute was signed. Although such a procedure may apply for the specific cases when the public procurement contract does not include the FIDIC GCC – as it was the case before the FIDIC GCC were implemented for the infrastructure projects - in case the FIDIC GCC (and Clause 20 providing the dispute resolution mechanism) apply, the entire approach to the settlement of disputes shall be reconsidered in the light of the provisions of such an agreement.

Despite the fact that the EGO 34/2006 does not provide specifically that in case arbitration is chosen as dispute resolution mechanism the provisions of art 287-287 shall not apply, this is an obvious solution since they are totally different in purpose and means of procedures.

Also, if the FIDIC GCC conditions are applicable to a public procurement contract, even if assimilated to an „administrative act”, the state courts and the state organised jurisdiction could not interfere unless and to the extent it is necessary for the enforcement of the arbitral awards.

The conciliation procedure referred to in article 11 of the Law no 544/2004 cannot be entirely assimilated to DAB procedure under Clause 20, Sub-Clauses 20.2-20.5 FIDIC GCC. Some authors, when detailing on the issue of the time limitation related to FIDIC based contracts did not consider or discuss the eventual application of the time limit provided by article 11 of the Law no 554/2004 but mainly the situation of the DAB procedure and whether or not the pre-arbitral mandatory proceedings are to be interrupting or not the time limitation period of 3 years.

As the majority of the authors on FIDIC GCC agree that the DAB procedure and the conciliation are of a different nature, as adjudication has a more judicial character than the conciliation that aims only to clarify parties’ positions and eventual concessions they would be willing to make. The adjudication has the features of a settlement procedure finalised by the issuance of a decision binding for the parties unless and until revised by the arbitration procedure.

All the above are in our opinion arguments that the time limit of 6 months could not be considered applicable for contracts where the parties’ agreement is embodied in a contract following FIDIC GCC principles and including Clause 20 dispute resolution mechanism.

3. Time Limitation under the Romanian Old and New Civil Code

As already highlighted by many authors in the New Romanian Civil Code, the general approach to the time limitation was changed. Under the old Civil Code regime the time of limitation was a strict and mandatory for all contracts under Romanian law. Under national law – during the Old Civil Code - the time of limitation was an issue of public order and derogations were not permitted.

The parties were not allowed to have contractual arrangements on time of limitation. The provision of Article 1 of the Decree 167/1958 on status of limitation were clear in this point: „Any clause departing from the legal regulation of the statute of limitation is null”.

The New Civil Code changes the approach on the time limitation excluding it form the public policy and thus the parties are now allowed to choose the term for the time limitation or other aspects and only in the lack of a specific agreement of the parties in this respect, the general rules laid

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8 Law 287/2009 republished and further amended
down by the New Civil Code shall apply, containing more or less the same main principles as regards
the status of limitation as the former ones.

Beside this change related to the freedom of the parties to establish the regime of the time limi-
tation, the law reiterates mainly the same principles governing the time limitation status as in the
previous regime of the Old Civil Code.

Consequently, in our opinion the same issues related to the time limit status for FIDIC based
contracts which were raised before New Civil Code entered into force - and still applicable for the
contracts concluded before that date - are to be considered.

Thus, the general practice of both the Romanian Courts and ICC is that public procurement con-
tracts based on FIDIC GCC cannot be construed by excluding the application of the civil law regula-
tions, even if the administrative courts are competent to decide on the performance or modification
of such contracts, the applicable rules are these of civil law.

Therefore, in our opinion, even if not to be excluded totally, the statute of limitation in case of a
FIDIC GCC based contracts is to be regulated by the civil law principles, i.e. either the provisions of
the Decree Law no 167/1958 and the Romanian Civil Code of 1864 or the provisions of the New Civil
Code depending the provisions of the substantive law in force and applicable at the date of signature
of the contract.

The type of claims a Contractor may raise under a FIDIC GCC based contract are various. Based on
the specific of each claim the specific statute of limitation and the moment when relevant time limits
start to be counted and other similar aspects are to be established. An examination of such claims
as a whole by applying certain standards could not be the most adequate way to approach this issue
since there are several other aspects and specific provisions of law which shall be considered.

As an example, as a matter of principle the date of occurrence of an event may not present impor-
tance from the point of view of the statute of limitation when in context of contractual relationships
and not in case of tort – delictual liability.

Also, the awareness on the occurrence of an event does not equal with the possibility of foresee-
ing at that very moment its consequences to contractual relationship or at least not all of them. This
could be the reason why the FIDIC GCC based contracts refer to being aware and acknowledging the
potential consequences of an event. Moreover, foreseeing the consequences may not amount to the
evaluation or establishing the monetary effect of such consequences on the specific party.

As a general rule the commencement of the time limitation period is either when the right (or the
legitimate interest) is infringed, denied or contested, or (ii) the date when such right, even not con-
tested or infringed, had to be exercised. The second hypothesis usually applies when a right may not
be recognized by the other party until the interested party raises a claim in this respect. One shall consider
the fact that the reason why claims become time banned is to sanction the passivity in claiming a right and
triggers a certain equality between the parties so that a potential claimant not to benefit from its own pas-
sivity in making a claim.

In our opinion, the procedures set out in Sub-Clauses 20.4 (DAB procedure) and 20.5 (post DAB
amicable settlement) of the FIDIC GCC are not relevant to the time when the period of limitation
starts running since, as a general rule the right to claim i.e. to file a claim before the arbitral tribunal
was not born before the expiry of the mandatory procedures as set out in Sub-Clauses 20.4 and 20.5
of the FIDIC GCC which are a condition precedent to arbitration. Consequently, since there is no
contractual time limit set for the parties to request a DAB’s decision, it is unacceptable to confer a
discretionary right upon a party, even indirectly, to determine when the period of limitation would
ultimately start to run, considering the fact that the date on which a DAB makes its decision will de-
pend on the date on which a party will have requested such decision under Sub-clause 20.4 General
Conditions. As a conclusion the moment when the limitation period starts to run in FIDIC
Contracts, i.e. the date when a party’s right to action was born according to the FIDIC GCC is the
moment when the party’s rights materialized either by submitting a claim under Sub-Clause 20.1 of the General Conditions of Contract\textsuperscript{9} or by any other similar request of the Employer.

The other opinion expressed by authors in this field is that of Prof. Marian Nicolae who concludes in his article on this topic that „In conclusion, when the DAB decision is challenged in time and the parties have not waived the conciliation procedure, the right to file arbitral claim for the payment of the sums granted by the DAB is, practically and implicitly affected by a double suspensive condition, respectively the challenge/non-challenge by the other party of the DAB decision, on one hand, and of the attempt/failure to attempt amicable settlement of the litigation before writing to the arbitral tribunal, on the other hand, which means that in this case the commencement of the limitation period is the one set, explicitly, by art. 7 par. 3 of the Decree no. 167/1958: ‘If the right is under a suspensive condition or a suspensive term, the limitation period starts running from the date when the condition accomplished or the term expired‘.“\textsuperscript{10}

On the other hand, in our opinion one of the key elements of the FIDIC contract arbitration agreement is contained in Sub-Clause 20.6 GCC: „Unless settled amicably, any dispute in respect of which the DAB’s decision (if any) has not become final and binding shall be finally settled by international arbitration“. Since the FIDIC GCC do not contain any time limit in order for a party to request a DAB’s decision, that party may freely decide when to request a DAB’s decision. It seems unfair and contrary to the general principles of civil law that a party’s decision to request a DAB’s decision only to be relevant to the commencement date of starting the limitation period triggering that the period of limitation lies entirely in the hands of that party.

An other opinion shared by court practice in Romania but in non FIDIC GCC based contracts was that the statute of limitation shall be calculated in construction contracts from the moment of the final reception of the construction works under the specific regulations related to the final reception and quality in constructions, as that is the date when a party can claim whatever is to be claimed against the other this being the moment when the quality and the quantity of the works can be evaluated. Under such an approach, irrespective when the actual cause of action has occurred, the right to claim anything under the construction contract does not exists unless the final reception took place and form this date on the time limit shall be counted. Again it is our opinion that even if the contractors and employers in Romania have tried hard to reconcile the FIDIC GCC with the internal special laws applicable in construction field in general, it is generally accepted that such events may produce effects as regards the legal liability related the quality of the constructions towards third parties but such time limits or dates are of no consequence in what the contractual relationship and liability is concerned.

4. Conclusions

The main purpose of this endeavour was to clarify mainly the fact that no administrative time limits are to be considered as applicable in case of a FIDIC GCC based contract even if concluded further to a public procurement procedure. This type of contract becoming increasingly known and used implies a certain approach to the two tiered dispute settlement mechanism. Under these circumstances, going back to the main civil law principles governing the statute of limitation is the obvious solution but , nevertheless, this path could also lead to different opinions and conclusions. There is not one standard to be applied but the solution which we support is one base on an equilibrium between the parties and to limit as much as possible the possibility of one party to control the evolution of the contractual relationships.

\textsuperscript{9} Sub-Clause 20.1 reads as follows: „If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.(…)"

\textsuperscript{10} Marian Nicolae, op cit, Revista romana de drept privat 5/2011
Variation of works in contracts awarded through public procurement of works procedures. REGULATION AND CONSEQUENCES

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1. Introduction

Variations and adjustments of construction works are generally recognized as sources of many disputes between employers, contractors and other professionals involved in construction industry. This is why standard clauses and mechanisms to mitigate such risks are a continuous concern for all professionals worldwide. Nevertheless, even a well built contractual mechanism is sometimes ineffective in front of a stronger rule: the public policy of the country whose law is governing the contract.

Such a particular case is contemplated in this article by reference to the legal framework applicable in Romania in relation to the public procurement of construction works. Contractors entering construction contracts awarded through a public procurement procedure under the Romanian law should be aware that a series of limitations may affect their ability to pursue claims under variation and adjustments clauses in the contract, even when such variations are duly initiated by employers or engineers before taking-over. At the same time, this article will detail on relevant thresholds and conditions which would make a new procurement procedure mandatory for contracting additional works or quantities and items required by a variation of already existing contracts.
2. Public procurement rules are part of the public policy in Romania

In one of the most recent rulings, the High Court of Cassation and Justice confirmed an already consistent case-law whereby the imperative rules of the Public Procurement Law shall be considered as part of the public policy rules of Romania. There are qualified as imperative those rules reiterating the principles of the Treaty on the Functioning of the European Union (“TFEU”) on the free movement of goods, freedom of establishment and the freedom to provide services, equal treatment, non-discrimination, mutual recognition, proportionality and transparency, as well as efficient use of public funds. Equally, all mandatory rules relating to the public procurement procedures are acknowledged by the courts as being imperative rules forming the public policy in Romania.

In the case at hand, a contracting authority was ordered by the arbitral tribunal to pay the value of goods and equipment supplied by a contractor outside the initial terms of the contract awarded by the public procurement procedure. The contractor alleged that the contracting authority placed orders for supplies of equipment and quantities of goods in addition to those initially agreed in the contract. The way such orders were communicated to the contractor did not allow constitution of documentary evidences, but the acceptance of additionally deliveries of equipment and goods by the contracting authority was found by the arbitral tribunal as a conclusive proof for the existence of the agreement between the parties in dispute.

The arbitral award was challenged for annulment by the contracting authority on the ground that the award is contrary to the public policy, good morals and other imperative provisions of the law. Among other arguments mentioned in the claim, the contracting authority inferred that upon construing an agreement was made between the contracting authority and the plaintiff for the additionally supplied goods and equipment the arbitral tribunal failed to consider the mandatory rules of the Public Procurement Law.

The court found that the arbitral tribunal's interpretation whereby an acquisition of additional products not included in the initial public contract should be construed as validly agreed between parties shall be considered a matter of violation of the public policy and therefore a sufficient ground to quash the challenged arbitral award. Hence, without interfering with the merits of the case and the findings of the arbitral tribunal on the facts, both the court hearing the claim for the annulment of the award and the High Court of the Cassation and Justice, as court of appeal in respect of the former court's judgment ruled that an arbitral award ignoring the mandatory rules of the Public Procurement Law whereby no goods, works or services shall be considered duly acquired in the absence of a public procurement procedure shall be set aside.

3. General legal framework on construction works

Construction works in Romania shall comply with the rules set forth mainly by (i) Law No. 50/1991 concerning the authorization of construction works; (ii) Law No. 10/1995 on quality standards in constructions; and (iii) Law No. 350/2001 on land planning and zoning. Incidental rules and provisions may nevertheless be found in a large number of laws and secondary legislative enactments approving technical methodologies and standards, as well as procedures to ensure standards of conduct and quality in construction. For the purpose of this articles, it is worth mentioning at least (i) Order No. 839/2009 of the Minister of Regional Development and Housing for the approval of the methodology for the enforcement of Law No. 50/1991; (ii) Government Decision No. 273/1994 for the approval of the Regulation on the handing-over of construction works and plant; (iii) Government Decision

1 Decision no. 7750 issued on December 12, 2014 by the Tax and Administrative Disputes Section of the High Court of Cassation and Justice.

No. 925/1995 for the approval of the Regulation on technical survey and assessment of quality of construction designs and works; (iv) Government Decision No. 766/1997 for the approval of certain regulations on quality in construction; (v) Government Decision No. 622/2004 for regulating the terms for launching new construction products and equipment; and (vi) Government Decision No. 525/1996 for the approval of the General Regulation on Urbanism.

For the purpose of this article, it is worth considering the relevant legal provisions on the authorization of construction works and variations thereto particularly during execution of works by the contractor.

As a general rule, construction works can be performed in Romania on the basis of a building or a demolition permit issued by the representative of the local administrative unit where such works should be performed. A building or demolition permit may be issued only at the request of the owner or a holder of an interest in the real estate and provided all necessary approvals and endorsements are obtained from the authorities nominated in the urbanism certificates prior to this extent. Construction design and detailed specifications must be attached to the application for the building permit, and variations of design and specifications may also be required by the authorities in order to issue the relevant approvals or endorsements for the issuance of the building permit.

Validity of a building permit is not affected by the change of the holder of the permit before the handing over of the works, if such change is recorded in the land book and all the other terms of the building permit are complied with.

Changes in concept design or variations of technical solutions are in general subject to a new building permit. Changes in concept design (in Romanian, "modificari de tema") are defined by law as being those changes initiated by the owner to the initial functions, approved technical and economic indicators, space organization and placement and other fundamentals of the design and technical documentation based on which the initial building permit was issued.

By exception, a new building permit is not required for variation of technical solutions if (i) the initial functions are not altered; (ii) the terms and conditions laid down in the endorsement issued by the competent environment agency are complied with; (iii) all property related restrictions provided in the Civil Code are observed in the new technical solution; (iv) the placement specifications (i.e. height, land occupancy - POT, floor-area ratio - CUT, exterior design, alignment and minimum retreats) are not altered; (v) the stability and earthquake resistance of neighboring buildings are not affected; (vi) fire prevention and control and energy saving standards are complied with. Additional works required following the occurrence of unpredictable situations which comply with the requirements above mentioned may also be performed without the need to apply for a new building permit. In all such cases, variation of technical solutions shall be instructed by the civil and structural engineer, confirmed by an authorized design inspector and approved by the beneficiary of the building. The beneficiary of the building has to notify the variation of the technical solution to the issuer of the building permit.

Performance of works without having a building or demolition permit in place and failure to comply with the terms of the building or demolition permit is considered either a misdemeanor or a felony, depending on the nature of constructions performed or affected by the works and sanctions may range from fines to 3-month to 1-year imprisonment (in case of felony). Such sanctions may be accompanied by the stay of the works until a valid permit is issued or by the demolition of the unauthorized works.

In all cases when a valid building or demolition permit is not in place, the beneficiary that usually acts as employer in the works contracts bear full responsibility unless the contractor is not assuming the design and technical solutions, case in which responsibility may be shared. A variation of works after commencement shall therefore observe the requirements for a new permit or the relevant obligations detailed above in case no new permit is required.

At last but not the least, it is important to mention that a contractor must observe its own profes-
sional responsibilities to uphold the standards and quality in construction works as such are provided by Law No. 10/1995 on quality standards in constructions, particularly those concerning the advise on the technical solutions concerning the stability and resistance of the works, which may have additional impact to and eventually interfere with the limitations set by the public procurement rules.

4. Public procurement rules and limitations for additional works

Construction works contracted by way of public works contracts\(^3\) shall comply with a series of limitations and rules which are mandatory for all parties involved in the contract and the procedures for the awarding of the contract.

For the purpose of this article, we will only contemplate further on the relevant rules incident in case of variation of works already subject to a contract awarded by a contracting authority. Reference to applicable legislation will not consider the particular case of public procurement by entities operating in water, energy, transport and postal services. Thus, we will assume that a duly awarded public works contract is in place, but variations are necessary to complete the works. As detailed in Section 3 above, variations may generally be required by necessary changes in the concept design or of the technical solutions usually determined by external circumstances not foreseen at the time the public contract was awarded. In such cases, it is worth determining when a new procurement procedure is required and when amendment of the initial terms and conditions of the contract is allowed.

For the contractor receiving from the beneficiary of the building the variation of technical solutions instructed by the civil and structural engineer, confirmed by an authorized design inspector and approved by the beneficiary, the rules set forth in the Law no. 10/1995 on quality standards in constructions make such variations mandatory, even when according to the public procurement rules variation works are not duly acquired.

Thus, a contractor is compelled by the rules of construction to comply with the variation orders and, at the same time, the rules of public procurement may not recognize such works in the absence of a new procurement procedure.

Caught between two set of mandatory rules, each specific for its field, one must first determine which rule prevails within the *specialia generalibus derogant* principle application. Conclusively, the High Court of Cassation and Justice in its recent case law\(^4\) determined that the prevailing rule is the Public Procurement Law, whenever in conflict with laws regulating construction works, particularly Law no. 10/1995 on quality standards in constructions.

At present, the Public Procurement Law does not contain specific provisions regulating the cases when a public contract may be modified without the need to proceed with a new public procurement procedure. Undoubtedly, the possibility of the parties to a public contract to decide modification of the terms and conditions of the original contract is recognized under the general civil rule of the freedom to contract. Nevertheless, without specific regulations on the limits within which the right to amend the terms and conditions of the original contract may be exercised, the contracting authorities showed a high degree of reluctance to modify public contracts. As a result, an impressive number of disputes and litigations were pursued in front of the competent courts by contractors in most of the cases to compel the contracting authorities to agree with the modification of contracts and with claims derived from additional works and costs. Modification of public works contracts became subject-matter of enactment only recently, in August 1, 2013, when Ministers Order No. 543/2013 for the approval of the Guide on the main risks identified in public procurement and on the recommendations of the

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\(^3\) For definition of *public works contracts* please refer to Article 4 of the Public Procurement Law, which reiterates the definition provided under Article 2 item 1 (6) of Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC.

\(^4\) See Decision no. 2475 issued on May 28, 2014 by the Tax and Administrative Disputes Section of the High Court of Cassation and Justice and Decision no. 5641 issued on June 7, 2013 by the Tax and Administrative Disputes Section of the High Court of Cassation and Justice.
European Commission to be considered by the management authorities and public agencies in the supervision of the public procurement procedures (the „Guide”) was adopted. Chapter II of the said enactment sets forth mandatory provisions for the public bodies commissioned with the supervision of the public procurement procedures in relation to the criteria and cases when a modification of a public works contract shall be construed as a new procurement and shall be subject to a new public procurement procedure.

The general rule under the Guide is that a new procurement procedure is required only when a modification is qualified as substantial and furthermore explains what shall be construed by substantial modification of a public works contract as well as cases determining such modifications. Accordingly, a modification shall be considered substantial when (i) it sets out new conditions which had they been provided in the initial procurement procedure, would have allowed admission of other candidates or the awarding of the contract to a different tenderer; or (ii) it changes the economic balance of the original contract in favor of the contractor; or (iii) it materially extends the scope of the contract to include works, services or products not considered in the initial procedure.

By exception, even when a substantial modification of an existing public works contract is determined a new public procurement procedure is not required if (i) such modification is needed to procure additional works deriving from unforeseen circumstances; and (ii) the works cannot be completed by other contractor for technical and economic constraints on the contracting authority or because the additional works are needed for the completion of the initial works; and (iii) the aggregate value of the additional works does not exceed 20% of the initial value of the contract. The burden of unforeseen circumstances is on the contracting authority, which shall apply the diligent contracting authority test. In such cases, the contracting authority is allowed to procure additional works by negotiation without prior publication. Nevertheless, it is to be assumed a new public contract shall be signed for the purpose of procuring the additional works.

In Sub-chapter 2 (Events that do not trigger substantial modification), the Guide reiterates the clarifications issued by the European Commission in DG Markt Ares (2012) Communication 601434 dated May 21, 2012 whereby it is confirmed that no new procurement procedure is required for public works contracts where the price is determined by reference to unit prices and estimation of quantities of materials and where variation clauses are included. Variation shall not be considered a modification of the initial contract if (i) they are due to normal differences between estimations and final evaluation and do not result from material changes of the technical specifications or other initial conditions required by the contracting authority; (ii) they are reflected in the price following evaluation of each item of work; and (iii) they were clearly stipulated in the variation clauses acknowledged by all tenders in the initial procurement procedure. For public contracts with a value under EUR 5,000,000.00 the condition regarding the variation clauses is not applicable. Nevertheless, the Guide explicitly confirm that in case a modification deriving from a variation clause is substantial (in the sense above-mentioned, included the threshold of 20% of the initial value of the contract), then such modification must be subject to a new procurement procedure. If successive modifications are made to the same contract the limitation shall apply to the aggregate value of the modifications.

If a modification is not substantial, then the contracting authority may decide to act under the contractual mechanism of the variation clauses or to enter an addendum to the initial contract, as the case may be.

On April 17, 2014 Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC entered into force. As all the other Member States of the European Union, Romania has the obligation to transpose the provisions of this directive by April 18, 2016.

Under such circumstances it is worth mentioning that Directive 2014/24/EU contains extended provisions on modification of public works contracts in Article 72 (Modification of contracts during their term) as well as an increase of the threshold relating to the aggregate value of additional works deter-
mining a modification from 20% to 50% of the value of the original contract.

Accordingly, rules for modification of existing public works contracts to include additional works are expected to be implemented in the Romanian law by way of amendment of the Public Procurement Law or by passing a new law on the matter.

5. Conclusions

As explained in Section 3 above, variation of works may result from changes in concept design or of the technical solution. Whilst in the former case, an employer is required to consider new permitting and likely new tendering, in the latter, both the employer and contractor are bound by the contractual mechanisms agreed on variation and eventually have to consider an amendment of the contract. Furthermore, in case of public contracts, the contracting authority must observe the test of substantial modification, as well as the applicable legal thresholds in order to conclude whether a new public works contract must be awarded by way of negotiation without prior publication or by public procurement procedure.

Contractors under public works contracts must be aware of their right to negotiate variation and other review clauses to allow clear valuation and commensuration of additional works, as well as the right to time extension and compensation whenever the completion of works under initial contract is delayed due to public procurement mandatory rules whereby additional works shall be subject to new procurement procedures. Right to suspend the works during disputes on the application of public procurement rules is also advisable to be agreed upon the negotiation of the terms of the contract. It is also worth noting that for the negotiation purposes it is advisable to have these contractual mechanisms discussed and agreed in principle during the tendering stage of the procurement procedure, when all participants are duly allowed to request changes in the procurement documentation.

Finally, contractors have to consider that sometimes it is better to risk being held liable for a delay in performing the contract, than finding yourself in the position to have additional works completed and not recognized as validly contracted and agreed upon because of violation of public procurement law. Also, contractors should take into account that it is more convenient to address and prove under an existing contract a necessary stay of works in order to comply with the public procurement law than to fight a court case for unjust enrichment of the contracting authority when the public procurement law rules supreme.
The coding of legislation in the fields of **regional planning, urban design and construction**

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**Introduction**  
As a result of the dynamics of building construction activity in Romania in recent years major failures were found in the interpretation of regulations in the areas of regional planning, urban design and construction, especially in regard to practical application of these regulations published while browsing the logical steps for building up a building/construction.  
At this time, legislation in the fields of regional planning, urban design and construction is bushy and in some aspects is not correlated with related areas, most often being questionable interpretation of the applicable rules, both in relation to subsequent or related legal acts, as well as corroborating with the EU regulations in the field incidents.  
Doctrine and especially legal practice in Romania in recent years have shown a constant concern linked to the pressing need for codification, systematization and simplification of legislation in the areas of regional planning, urban design and construction, in a context characterized by the abundance inflation normative legal acts, a poor classification and unstable rules interdependent areas such as administrative law and property rights, but not limited only to them.
Following the major failures that have seriously affected social life in Romania in recent years, policy actors should engage in Romania coding procedure of legal regulations in the fields of regional planning, urban design and construction to ensure greater legal certainty and a better enforcement of law in areas covered by this paper, according to administrative law and constitutional exigencies in ensuring substantial rights without being limited to these two areas.

The regional planning, urban design and construction are the evolving fields and influences of European law over national legal system are now regulating their records and there is also a reverse process of influence.

In Europe, there are already initiatives coding intense legal rules in most areas of responsibility which is why we think it is normal that this regulatory approach is superior promoted internally within the national legal system, the system planning areas planning, urbanism and construction, occupies a considerable weight and therefore very important for sustainable development.

By the provisions of art. 18 of Law no. 24/2000 (r2) on legislative technique for drafting laws defined codes as a tool for „rationalization and concentration of legislation”, following the „rules of a particular area or a particular branch of law subordinate principles common to be consolidated into a unitary structure”.

In other words, according to national law, code is a coherent body of texts which includes, according to a systematic plan, all the rules of the matter. Imperative consistency legislation requires that „an industry to be regulated as a whole by a single act.”

It is noticeable that the areas spatial planning, urban planning and construction are inextricably interlinked, and we consider that legislation in these areas should be codified simultaneously to ensure greater coherence of the interdependency of spatial planning regulations, general and operational urbanism, design, permitting and construction. So it is crucial that legislation governing the logical steps that contribute to build a building to be enacted at the same time, uniform and coherent.

Also predictability of law, another essential aspect of a modern administration of a state of law cannot be assured only by the quality of grammatical normative acts in the fields of regional planning, urban design and construction, but also requires the availability of such acts, despite the multitude successive changes are brought.

On the other hand, the principle of legality - a veritable constitutional postulate and EU law - requires, in turn, systematized rules, clear, coherent and interrelated hierarchy vertically and horizontally normative acts, rules governing public authorities work so as to be easily understood legal system also by the citizens and therefore controllable in easy way.

The addressees of law must be able to know without ambiguity the rights and obligations conferred or imposed by law, and the law must be predictable, clear, precise, limit opportunities contrary interpretation and exemptions.

The difficulty of this legislative measure is huge because its extent on three complex areas, but especially because of the interdependence with multiple regulations in other subjects, such as administrative, civil, environmental, civil protection, culture etc.

In this context, the practical limits of the encoding process of the areas spatial planning, urban planning and plant are given by the fact that cannot be coded absolutely with all applicable legal and consistent rules are needed for reference, correlated and precise laws governing related areas, avoiding - it redundancy, ambiguity, double regulation and ambiguity.

However, exceptions will be carefully legislated so as not to allow the abuse which can determined as the exception to become the rule, and the rule to remain ineffective.
Content

1. Codification areas regional planning, urban design and construction - primary requirement for improving applicable legislation

From the perspective of the beneficiaries of the law on spatial planning, urban design and construction, the coding is of particular importance and correlation with the planned reform of public administration is the imperative.

This correlation would primarily provide basic public authorities a clear and orderly texts in force (“constant law”), while facilitating efficient and transparent decision-making mechanism in these authorities.

It is not insignificant the fact that any initiative encoding of such complex areas such as spatial planning, urban design and construction initiative would stimulate polic actors to ensure improved regulation and other related fields with the aforementioned legislation should be harmonized and thus paving the reform and further simplify regulatory acts that a law of this magnitude is to relate.

It should also be noted that the adoption of a code of law in the areas of spatial planning, urban design and construction would facilitate the use of a uniform terminology for the same legal realities, institutions, principles and legal concepts, thus reducing the risk of different interpretations or even contrary to their how often did during the boom, but also during the crisis and post crisis economic eloquent example being represented by the investment objective of Bucharest known as “Cathedral Plaza”, without this being a unique case in Romania’s administrative center.

Finally, it should not overlook the fact that the adoption of legal regulations collated in code stable over time, with all the obstacles inherent in this period of formation of state institutions, would enhance public confidence in the continuity and sustainability regulations incidents, and Romanian and foreign investor interest investing in real estate development and beyond.

Currently, legislation in Romania is plentiful with regulations on the aspects of the definition and functioning of the institutions and authorities in the fields of spatial planning, urban design and construction, the definition and the organization and functioning of public services by issuing administrative documents public authorities, mechanisms for resolving citizens’ petitions by authorities, mechanisms for ensuring government transparency before civil society building’s location near historical monuments, fire safety, civil protection, environment etc.

The abundance of regulations provides a number of special procedures and exceptions to the common law, often contains contradictions between provisions, aspects that leads to cumbersome and inconsistent application thereof by the beneficiaries, i.e. public authorities, investors, citizens and by courts.

From the existing practice of research conducted by different institutions in Romania interested and dedicated law doctrine in the areas of planning, urbanism and construction in recent years, especially following malfunctions resulting:

- Lack of legislative consistency level caused by multiple law regulations, and a real inflation in subsequent normative acts as a result of the fact that the right of legislative initiative belongs to multiple decision makers in the central government decision makers who are coordinating the process of lawmaker;

- Lack of clarity of normative and limiting the accessibility caused by their successive amendments;

- Lack of systematization of rules that govern the work of public authorities, so that the regulatory system to be understood by everyone and therefore easy to be led and controlled manner, and easily accepted and applied by citizens and investors;
Inconsistent terminology, each adopting from initiator often their own definitions in the content regulations initiated;

Lack of corroboration rules, concepts and spatial specific legal, planning and construction of the administrative procedure and the rules of administrative disputes;

The absence of administrative law regulations indispensable modern institutions such as real consultation and no formal decisions unfavorable to those concerned, and competent full reasons for administrative acts, revoke administrative acts that have not enforceable against third parties e.g.;

Creative and irresponsible application of the provisions of European Union law with direct applicability by adopting legal dispositions aberrant, contrary to the EU regulations and/or the Council of the European Union.

The legislation bearing on the subject matter of this paper, namely, the main legislation whose provisions require correlation and harmonization in a unified legal framework shows that regulations were followed while on the Romanian legislature need to regulate an area specifically, as a result of syncope occurring in social life.

The painting incidence legislation in the areas spatial planning, urban design and construction which could be subject to codification is presented in Appendix. 1.

2. Theoretical and practical coding areas spatial planning, urban design and construction

2.1. Legal science research methods in the areas of spatial planning, urban design and construction

Each science or branch of knowledge, such as the spatial planning, urban design and construction, can be discovered, analyzed, investigated, also known depth using classical methods used by specific legal research that realize a deepening of individual knowledge each problem, and a summary of their applicability to the generalization forthcoming regulations to improve and eliminate possible disturbances gaps in enforcement of coded fields.

Legal methods applicable legal research in the fields of research planning legislation, planning and construction, efficient coding purposes, its coherent and sustainable, but not limited to, are: logical method, comparative method, historical method, sociological method, prospective method etc.

2.2. Technical systematization of normative acts

Systematization is superior activity in developing normative acts and the Romanian legal system is governed by the provisions of art. 18, 27-29 51, 47 paragraph (5) and 51 par. (3) sentence II of Law no. 24/2000 (r2) on legislative technique for drafting laws, as amended and supplemented. The economy and the enactment of a contrary interpretation of art. 27, paragraph (1) of the aforementioned Law, it is clear beyond doubt that the codes can initiate projects without appointment and approval of preliminary thesis committees governed by the provisions of art. 26 to 27 of Law no. 24/2000 (r2).

Moreover, the Government came to support the assertions above regulated in that way for the endorsement of codes by the provisions of art. 11 of Government Decision no. 561/2009 approving the Regulation on procedures at government level, for the development, approval and submission of draft policy documents, draft legal acts and other documents for adoption/approval.
Law no. 24/2000 regulates two ways of concentration of the relevant provisions of a field, the systematization and concentration legislation and embedding codes on materials codices normative acts.

Under the same law, codification is a way to systematize what level achieved integration law normative acts in one or more areas, aiming at positioning “in all legislation project”, „uniqueness rules governing”, „special and exceptional provisions” and not during the past foremost „avoiding duplication and sanitation law”.

At the theoretical level, coding activity is likely to be achieved by sequencing logic level several provisions from law regulating a specific area without brutal interfering with the original provisions, but consider that legislation in Romania in the areas of spatial planning, urban design and construction must be integrated coherently into a new law to harmonize in a logical structure imposed by social realities and the provisions incidence presented in Appendix. 1.

Incorporating the legislation in codices on materials should be achieved by grouping Legislative Council regulations on the industry or related fields contained in the laws, regulations, decisions and minister orders.

It would also be possible to join the legal provisions in a field in a homogeneous structure, presented as a codex, respectively, a logical connection between regulations imposed by different sets of regulations that can facilitate knowledge and their application.

Given that, until now, Legislative Council as the public authority with responsibilities in this field has not developed any initiative in pursuance of Article codex. 19, paragraph (2) of Law no. 24/200 (r2), and we can say without any mistake in the sense that legal system in Romania was not consolidated at 15 years after the adoption of the framework law and we say nor believe that it will strengthen soon, so any legislative initiative to codify a field or making a Codex would be appreciated at national level by all beneficiaries areas, regardless from whom they initiative comes.

2.3. The principles that should underpin the codification of legislation in the areas of spatial planning, urban design and construction

To ensure requirements aimed at sustainability, efficiency, effectiveness and credibility of any initiatives coding areas spatial planning, urban design and construction should respect the following principles which are not limited:

- Ensuring compatibility with existing law to new legislation and European Union law;
- Determining the degree of detail and the generalization to be achieved by the new regulation;
- The development, promotion, implementation and adoption simultaneously real and not formal policy for the implementation of the new rules;
- Application of the new regulations through an experimental stage/pilot, for example in a county for a period of one year;
- Establishing a transitional period for the development, adoption and implementation of primary legislation;
- Establishing, planning, preparation and provision of human, material and financial resources of implementing the new regulations, both at the local government level and at the level of central public authorities.
3. Objectives considered in drafting, approval and implementation the draft law that could be called „Code of spatial planning, urban design and construction”

The bill that integrate into a code of spatial planning, urban design and construction will have to consider a multitude of requirements to fulfill the following objectives:

- Standardization of existing legislation in the current legislation and regulation for the first time legal situations encountered by law enforcement spatial planning, urban design and construction;

- Collating rules, concepts and specific legal procedures in the fields of spatial planning, urban design and construction;

- Simplification of procedural means of action in the fields of spatial planning, urban design and construction by ensuring greater consistency and predictability of procedures undertaken considerable planning and execution of investment objectives;

- Discouraging deviations from the laws in incidence by implementing an appropriate sanctions, much more severely.

Conclusions

To achieve the objectives mentioned above, following the innovations and challenges of legislative solutions will be regulated in a bill ferenda, called „Code of spatial planning, urban design and construction”:

a) statutory legal regime of compensation for administrative prohibitions on the right to property resulting from urban and, consequently, the development policies of the areas recognized as having strong potential investment will need to provide sources of funding to support public policies and ensuring completion operative expropriation for public utility;

b) the public will at the strategic level, national, urban planning law interferes with and provide necessary support to the Government develop public policies at the macroeconomic level and at the level of operational urbanism, right in becoming the instrument can and should ensure effective execution of the achievement of sustainable development policies and strategies;

c) lack of coherent public policy in vital areas of sustainable development, namely the environment and urbanism issues and deepen the free market imperfections determine alteration of social values recognized as essential, namely, life, liberty, equality, justice, personal rights etc;

d) to limit abuse of the exemption mechanism of statutory provisions, as it leads to damage the public interest by providing private interest of the actions of the actors involved in the mechanism development, approval and implementation of the regional planning documentation;

e) the ineffectiveness of the way it is regulated the issue of informing people in our country, in terms of the rules and decisions of public authorities regarding the approval of documentation regulating regional planning in the sense that the proposals or decisions informing urban effects ensure too little time available to interested local citizens or to vote on the decision or project in question;
f) limiting the power of the original application of national legislation which, although it was sometimes harmonized, declarative and even factual level, the legal provisions of the European Union, its application its mark negative daily reality takes hold with us „urban wild”;

g) clarifying a series of concepts, terms and legal institutions in the administrative procedure: administrative activity, public authorities, public service, public power, regulation, administrative contract administrative operations and administrative acts, as of appreciation, as injured, legitimate interest, the public interest;

h) removing the trend of returning to the old legal regulations in the pre repealed since such an attitude from the Romanian State infringes the principle of sincere cooperation within the European Union.

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2. Romanian Civil Code, as amended and supplemented;
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6. Law no.50 / 1991 (r) authorizing the execution of construction works, with subsequent amendments;
7. Law. 200/2004 on the recognition of diplomas and professional qualifications for regulated professions in Romania, with subsequent amendments;
8. Law. 554/2004 on administrative procedure, as amended;
9. Law. 544/2001 on free access to public information;
10. Law no. 215/2001 on local public administration, with subsequent amendments;
11. Law no. 24/2000 on legislative technique for drafting laws, with subsequent amendments;
12. Law no. 31/1990 (r) on companies;
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Technical and legal standards influence the construction law. Their validity is often ambiguous. It’s time for an analysis.

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Dispute resolution
in construction contractual relations

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Introduction
In recent years one of the most important issues to be considered in drafting any contract, including a construction contract, is the method of future dispute resolution. Although many contracts may remain silent on the issue of future dispute resolution; the costs in time, money and destroyed business relationships which can be raised when disputes are resolved through traditional litigation have meant that more and more contracts now include provisions providing for or mandating dispute resolution through so-called dispute resolution. The problematic issue refers to any type of dispute resolution which does not involve adjudication through litigation in a court and it may involve, either alone or in combination, arbitration, mediation, negotiation and counseling.

The main body
The problem of setting dispute regulation mechanisms comes to be very important not only from technical, but also from practical point of view. Over the past two decades the construction industry has made tremendous progress in developing more efficient methods of dispute prevention and resolution. In fact, experts frequently refer to the construction industry as being on the innovative edge regarding dispute resolution. Construction disputes are fairly common, and they vary in their nature, size, and complexity. Mark Appel, senior vice president of the American Arbitration Association, stated that „[t]he construction industry...[is] really the industry that sponsors our work.” (ENR 2000).
Although this statement may initially appear to be an indictment, it simply reflects the complexity of a contemporary construction project, which requires the orchestration of numerous interdependent components, including information, materials, tools, equipment and a large number of personnel working for independent engineers, contractors, and suppliers. Construction disputes, when not resolved in a timely manner, become very expensive – in terms of finances, personnel, time and opportunity costs. The visible expenses (e.g., attorneys, expert witnesses, the dispute resolution process itself) alone are significant. The less visible costs (e.g., company resources assigned to the dispute, lost business opportunities) and the intangible costs (e.g., damage to business relationships, potential value lost due to inefficient dispute resolution) are also considerable, although difficult or impossible to quantify. The theory and practice of realization of construction contractual relations in international practice worked out and presented several methods of dispute resolution.

- **Step Negotiation** generally requires the individuals directly involved in the dispute to seek resolution through direct negotiation. If a resolution is not reached within a predetermined length of time, the dispute is elevated to the next level in the organizations. This process normally continues to senior levels of each organization.

- **Dispute Review Boards** typically consist of three neutral experts, who visit the site periodically in order to monitor progress and potential problems. When requested by the parties, the board conducts an informal hearing of the dispute and issues an advisory opinion that the parties use as a basis for further negotiations.

- **Mediation** is “a forum in which an impartial person, the mediator, facilitates communication between parties to promote reconciliation, settlement or understanding among them.” (Texas Civil Practice & Remedies Code §154.023).

- **Arbitration** is “a forum in which each party and counsel for the party present the position of the party before an impartial third party, who renders a specific award.” (7 Texas Civil Practice & Remedies Code §154.027).

A review of widely-used standard contract forms provides an understanding of how dispute resolution is frequently addressed in contemporary construction contracts. These standard forms were developed through the combined efforts of a number of individuals and professional associations. The problematic issue concerning the professional associations comes from the professional and qualitative legal service providing, because as the practical realization shows, this means is in direct dependance with the providing legal service.

Some scientifical sources, trying to present dispute resolution in construction contractual relations, refer to the following pyramid.

- **Litigation**
- **Third party alternatives**
- **Lawyers**
- **Success of claim**
- **Claim accepted**
- **Compromise**
- **Claim rejected**
- **Claim**
- **Grievance**

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• Perceived injurious Experience
• Transactions

The use of existing from a relationship will essentially depend upon the availability of alternative opportunities or partners. Unofficial systems comprise a continuum of situations where parties settle amongst themselves by reference to the official rules and sanctions provided by the institutional facilities.

Arbitration has been the traditional method for the resolution of construction disputes for many years, until the introduction of a range of problematic techniques, adjudication and the introduction of pre-action protocols in litigation.

The three core processes of dispute resolution are considered before introducing the range of frequently encountered techniques. Each of the main dispute resolution techniques is then considered in turn. The „conventional” model of dispute resolution is one of an adjudicative process, most frequently fulfilled by the courts. According to Schapiro the ideal court, or more properly the prototype of the court, involves:

• an independent judge applying
• pre-existing legal norms after
• adversarial proceedings in order to achieve.

Theory also discusses another important way of dispute resolution, that is ADR or as it is said Alternative Dispute Resolution mechanisms. The term ADR has attracted a great deal of attention in legal and quasi-legal fields since the mid-1980s. However, the 1990s appear to have witnessed an enormous growth in the „ADR debate” with an ever increasing sphere of academics, lawyers and consultants entering the arena. Although the concept of dispute resolution techniques which are an alternative to the court system is not new, the more recent advent of the acronym is essentially taken to describe the use of a third party mediator who assists the parties to arrive at a voluntary, consensual, negotiated settlement. Whilst the origins of mediation may be ancient and Eastern, the recent more formalized technique has principally developed in the USA. In the UK, mediation was initially taken seriously in the resolution of family disputes. But, has mediation, or other alternative methods, attracted equal attention in construction? Not only is the construction industry important nationally and internationally, but it is also, arguably, the largest industry in the UK; attracting an equally large volume of diverse disputes, across a wide range of values.

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2 Sarat, A. (1985), „The Litigation Explosion, Access to Justice, and Court Reform: Examining the Critical Issues 37” Rutgers Law Review 299, at p. 332. See also Gallanter, M. (1983), „Reading the landscape of disputes; what we know and what we don’t know (and think we know) about our allegedly contentious and litigious society” UCLA Law Review 31, p. 4.
**Conclusion**

As the article discussed, there are very many ways of dispute resolution mechanisms in construction contractual relations. Taking into consideration the wide range of usage of ways of construction dispute resolution mechanisms, it must be important to mention, that the way of dispute resolution mechanism in the contract comes to be one of the main issues, because as it was mentioned, the dismissing of the point may then cause future big damages and problematic financial costs. At the other end of the scale, problem solving between the parties represents the informal, non-binding approach, the successful outcome of which is an agreement to „settle”. In its most basic form direct negotiation provides a simple party-based problem-solving technique. A further dimension is added when either party introduces advisers. Nonetheless, the essential feature of this process is that control of the outcome remains with the parties.

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Can Machines Replace the Human Brain?  
A Review of Litigation Outcome Prediction Methods for Construction Disputes

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1. Introduction
Construction projects are naturally complicated and involve large number of unpredictable as well as external interrelated factors. Complex construction projects value is in excess of billions of dollars. As a result, disputes between the contracting parties are critical and difficult to resolve. Traditionally, litigation was the only avenue to resolve such disputes. However, with its complicated nature and technicalities involved, construction projects’ experts deployed alternative dispute resolution methods such as arbitration and mediation. Each vary in the involved resources and the legal consequences. Litigation, however, is found to be one of the most expensive and time consuming methods. Moreover, the results of litigation are unguaranteed. Therefore, researchers attempted to predict the outcome of litigation in the field of construction dispute to give the contracting parties a good order of estimate on the expected outcome. This would be a good tool to decide whether a party shall file a litigation case or not.
2. Construction Dispute Resolution

Generally, the complicated nature of construction projects and the involvement of swarm factors and players, make the construction industry susceptible to conflicts between contracting parties. Conflicts and disputes could yield from contract interpretation, unforeseen site conditions, changing market prices, client directed changes of work, and so on. Contract conditions are set in such a way to resolve conflicts that might arise in a project. Yet, the complexity of construction projects along with the changing requirements and scope, and the dependency on external factors such as policies, market prices and weather, make it almost impossible to draft a contract that could encompass all sorts of conflicts. In fact, a study by Cheung and Pang [1] demonstrates that incomplete contracts are the route of construction disputes.

If the conflicting parties fail to address a conflict through informal negotiation, the conflict escalates to a dispute. There exist traditional and contemporary dispute resolution techniques. Litigation is a famous traditional dispute resolution method through formal lawsuits. While the initial cost of litigation is relatively low, the expenses of the inherit litigation delays make litigation an expensive avenue to pursue. Moreover, litigation is public, which is not a desired aspect as it might negatively affect firms' reputation. Litigation decision is legally binding and can be enforced by law. Although judges lack technical background, they rely on experts in the field who evaluate and report the case [2].

Experts in the construction management field have deployed contemporary alternative dispute resolution methods (ADR) to resolve construction disputes such as arbitration, dispute review boards (DRB) and mediation. Arbitration is legally binding if an agreement of arbitration exists beforehand. However, a construction arbitrator has the related technical background, an advantage over the traditional litigation judge. Arbitration is less formal and more private; parties involved in an arbitration sign a confidentiality agreement. Arbitration provide a faster and more flexible resolution. In fact, arbitrators accept any form of evidence according to their importance and relevance [3]. Like an arbitrator, a mediator is an impartial party who reviews the dispute; however, the mediator decision is not legally binding. Similar to mediation, the decision of a dispute review board is not binding. DRB is considered a preventive ADR method as an impartial party representing each contracting party is appointed at the beginning of the contracted works, before any conflict arises.

3. Litigation Prediction Methods

As construction claims are complex and highly dependent on various interrelated factors, predicting the outcome of such dispute – if taken to court - would be very valuable to those parties involved in the dispute. Literature has shown an increase of 425% in construction litigation expenses from 1979 to 1990 while construction disputes’ settlements expenses increased by 309% only during the same time span [4]. Not only this, but litigation also affects potential future projects between the conflicting parties as discussed by Galadari and Al Hammadi [5]. Hence, it is evident that litigation costs more and has long-term negative effects as well. Such burden continuously motivates experts and practitioners in the field to find ways to predict the outcome of construction litigation before formally involving in one.

Arditi et al. [4], Arditi and Pulket ([6] and [7]) and Chau ([8], [9]and [10]) have explored several techniques in predicting litigation outcome by designing specific learning algorithm, and feeding it with training cases through its input cells, called perceptrons. In it is simplest form, the prediction of construction litigation outcome relies on comparing the case under question with a previous case of similar characteristics. The researcher shall find a similar dispute case that has somehow comparable properties, where the trials has been conducted under a similar law in a similar jurisdiction area. By definition, a construction project is a unique endeavor, hence, it is almost impos-
sible to find such similarities in historical cases to predict a particular present case. However, the advancement in the area of artificial inelegance made it possible to train a program on particular patterns, find the relation between sets of input and output, and predict new systems using data from past systems. The following demonstrate the developments achieved in prediction the outcome of litigation in the area of construction disputes. It is worth mentioning that for any given prediction method, the precision of litigation outcome prediction is as good as the availability of information related to comparable disputes and the corresponding decisions.

3.1. Artificial Neural Networks

Arditi et al. [4] deploy Artificial Neural Networks (ANN) to predict the outcome of construction litigation. In this study, data of 102 cases from Illinois appellate court between 1982 and 1994 were used to train the network, where 45 case elements have been identified to be relevant to the dispute cases. Similarly, possible court decisions to different involved parties have been identified to be 8 possible outcomes. Details of these attributes (input and output) are shown in Exhibit 1. These input and output elements have been expressed in a binary format.

In the traditional training of ANN, the perceptron is fed with the training data and the weights between the neurons are adjusted until the output of the ANN gets close to the actual court decision. This process is repeated over the entire training set. The ANN is then used to predict new pairs of input and output, achieving a prediction rate of 67%. A parametric study is also performed and concludes that the prediction rate does not significantly increase when increasing the training set. It is worth mentioning that the commonly used algorithm for this training process is the gradient-based belief propagation (BP) algorithm, which can easily get trapped into a local instead of a global optimum solution. This is a serious weakness of the algorithm.

3.2. Boosted Decision Trees

Arditi and Pulket [6] deploy Boosted Decision Trees (BDT) to predict the outcome of construction litigation. Decision trees are one of few effective tools in predicting the outcome of a system, given a large and complex input set such as a construction litigation case. Boosting is a plug-in for the training of machine learning and predicting algorithms [11]. The algorithm processes each training case, consisting of input elements (past litigation cases) and output elements (the court decision), continuously. The training set used is the same that have been used in the ANN approach. The same case elements as of those considered in the ANN approach have been considered. The study was performed in several stages to enhance the prediction rate as follows. First, the entire training set was used in the training process resulting in a prediction rate of 67. Then, the number of case elements (input) has been reduced to 41 elements and certain training cases have been eliminated from the training set. These include cases with missing information or conflicting data. Additional construction dispute cases from Illinois appellate court have been added to the training set and the final training set had 121 cases. Out of which, 90% were considered as training set, and 10% were reserved for testing purpose. After these amendments, the method was able to achieve 90% prediction rate over the testing set of cases.

1 Neurons are the artificial simulators of the human neural network; it simulates (through the training process) the logic of processing information in the human brain (the judge) to yield a suitable judgment.
2 Global optimal solution is the set of optimal weights assigned between the neutrons in the training process. However, local optimum is the set of best weights assigned between these neutrons, and found in a limited neighborhood subspace. Thus, a local optimum solution might not be the global optimal solution (not the best set of weights hence yields less accurate prediction of future cases).
**3.3. PSO-based Neural Network**

Chau [8] deploys ANN in the prediction of construction litigation outcome after training the network via set of previous litigation cases. Research has shown that multi-layer perceptrons in ANN can be trained to predict complex functions. In particular, the use of particle swarm optimization in training the ANN, has shown effective results according to Kennedy, Eberhart and Shi [12]. Chau [8] has relied on this result to develop an approach that predicts the outcome of construction litigation.

In the traditional training of ANN, the perceptron is fed with the training data continuously. Until the output of the ANN gets close to the target output, the weights between the neurons are adjusted. The disadvantage of the commonly used training algorithm -the gradient based BP algorithm- is that it can fall into a local instead of a global optimum solution. However, particle swarm optimization (PSO) algorithm has the ability to locate the global optimum solution faster.

To predict the outcome of construction litigation, Chau organized past construction disputes’ data into disputes’ characteristics and court decision. The work of Chau is based on Hong Kong court decisions from 1991 to 2000. Chau retrieved 1105 construction dispute cases from Hong Kong court and divided them into training, testing, and network validation groups. The training group size is 50% of the total cases, which demonstrates the importance of the training phase.

Chau defines 13 elements to characterize each construction dispute case as shown in Exhibit 2. The characteristics of the cases are expressed using a binary format. As a result, each of the construction disputes’ 13 characteristics have been represented by corresponding neurons in the input layer of the ANN. The output layer of the ANN, representing the court decision, involved 6 neurons, which are also expressed using a binary format. Chau [8] concluded that training the multi-layer ANN through the PSO algorithm is not only faster than the conventional gradient-based BP algorithm, but also more accurate. It achieves a prediction rate up to 81%; higher than the 67% of the ANN approach.

**3.4. Split-Step PSO-based Neural Network**

Chau [9] relies on his PSO-based ANN with an enhancement to the perceptrons’ training. Like the PSO-based ANN, construction litigation outcome is predicted after training the ANN via set of previous litigation cases. For consistency and comparison purpose, Chau [9] has used the same litigation cases that were used in the ANN approach. The weights between the neurons are adjusted throughout the training process by continuously feeding the ANN perceptrons with training data until the target output is achieved. In this approach, Chau combined the PSO-based algorithm with the BP-based algorithm in training the perceptrons of the ANN. Chau utilizes the strengths of each technique and avoids their weaknesses by using each technique at a different step of the perceptrons training process. At the first step, the PSO algorithm is used to provide faster search results for a predetermined generation number that provides a near-optimal weight matrix. At the second step, the BP algorithm is deployed to refine the weight matrix due to its local convergence capability. With such approach, the training process will not fall into a local optimum solution which is a drawback of the BP algorithm nor it will take longer time and many generations in the global search which is a drawback of the PSO algorithm.

Chau found that the Split-Step PSO-based algorithm provides a prediction rate up to 83% in the training process and a rate up to 82% in the validation process, with higher coefficient of correlation in both cases. This is higher than the prediction rates of 81% in the training process and 80% in the validation process of the PSO-based algorithm. More importantly, the fitness valuation time\(^3\) of the Split-Step PSO-based algorithm is 5% less than that of the PSO-based algorithm.

\(^3\) A measure of time directly related to the number of generations needed to achieve optimality
and 65% less than that of the BP-based algorithm. Chau concluded that the split-step PSO-based algorithm achieves the optimal solutions with less number of generations (faster).

### 3.5. The Case-Based Reasoning Approach

The Case-Based Reasoning (CBR) approach [10] compares the construction dispute characteristics with a base of previous disputes' characteristics and the corresponding court decisions. It also updates the case base with the newly predicted case to expand it and enrich its content. Chau defines the development of his CBR approach in four steps: building the case base from previous cases and retrieving past cases similar to the present case, adapting past court decisions to present case, evaluating such solutions' results, and updating the case base with the predicted case. For consistency, Chau considered the 13 characteristics of the PSO approach to characterize the dispute cases. These characteristics are used to find matching cases from the base to the present case. CBR considers pre-specified matching alternatives for each of the 13 characteristics. For instance, if there are late payments involved, the matching alternative would be “yes”. For other characteristics like type of contract, the method specifies range of choices such as remeasurable, lump sum or design and build.

Chau adopted two methods to assess the similarity between the base cases and the present case, namely, inductive reasoning method and manual adaption method. The inductive reasoning method is a decision tree with all possible case characteristics alternatives on its branches and weights are assigned to these branches to determine the overall matching score for each case from the base. The case with the highest similarity score is then chosen to be the predictor. This process is done automatically and objectively, which is an advantage. However, assigning weights to the decision tree branches requires sizable amount of cases on hand. On the other hand, the manual adaption method requires experts to assign such weights. This is done by studying the cases comprehensively and through an iterative process.

Chau uses the same data used in the earlier PSO approach. Out of the 1105 construction dispute cases, 825 cases are used to build the case base and the rest for testing the method. To analyze the importance of the 13 case characteristics, Chau has performed the research once based on the complete 13 characteristics, and once on a restricted set of 10 characteristics only. The restricted set study with the inductive reasoning approach and the manual adaption approach has achieved a prediction rate of 72% and 81%, respectively. However, the complete characteristics set study with the inductive reasoning approach and the manual adaption approach has achieved higher prediction rates of 77% and 84%, respectively. It is noted that the CBR approach with the complete 13 characteristics set and manual adaption provides way superior prediction rate.

### 3.6. Integrated Prediction Model

Arditi and Pulket [7] deploy an Integrated Prediction Model (IPM) to predict the construction litigation outcome. The model framework consists of data collection and consolidation, attribute selection, prediction and assessment. The model uses a collection of data mining machine learning algorithms called Waikato Environment for Knowledge Analysis (WEKA). In its simplest form, WEKA combines different applications and algorithms in a single process. For consistency, Arditi and Pulket [7] used the same 114 cases that he used in his ANN approach, adding the 18 cases that he have used in his CBR approach, totaling to 132 cases from Illinois Appellate court. The same 45 case elements used in ANN have been initially considered, keeping in mind that these case elements have been converted into binary values. Number of case elements selection tools have been used in three different combinations to decide on the case elements that will be considered
in the training process. Similarly, number of classifying algorithms\(^4\) have been used in the study. Details about these different tools\(^5\) are available in the original work of Arditi and Pulket [7]. The first training set contains 35 case elements and yields a maximum of 91% prediction rate. The second training set contains 8 case elements and yields a maximum of 85% prediction rate. The third training set contains 12 case elements and yields a maximum of 89%% prediction rate. It is noted that the third training set had one third case elements of that of the first training set, yet its prediction rate is just 2% lower than that of the first training set.

4. Observations

Based on the work of Chau, the CBR approach reaffirms that predicting construction dispute litigation is a challenging filed. In assessing the similarity between the base cases and the present case, CBR shows that the prediction rate of 84% achieved deploying the manual adaption assessment (manual human effort), is way higher than the 77% prediction rate of the inductive reasoning assessment (programmed), all based on the complete 13 characteristics set. This is expected as the manual adaption incorporates the human brain into the process, a natural tool that would not be easily mimicked despite the technological advancement. However, this is also a drawback of the CBR as the iterative process of manual adaption is lengthy.

Table 1 summarizes the main results of the reviewed work. In Chau’s work, the construction dispute cases that are used to train the network in the CBR approach is 50% more than that used to train his second highest approach, the split-step PSO-based. Holding the same attributes, the CBR achieves a prediction rate that is only 2% higher than that achieved by the split-step PSO-based approach. Hence, the split-step PSO-based approach might achieve a prediction rate higher than the 84% of the CBR approach, if the size of the training set is increased.

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Prediction rate</th>
<th>No. of Attributes</th>
<th>No. of Training Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP-based</td>
<td>67%</td>
<td>45</td>
<td>102</td>
</tr>
<tr>
<td>BDT</td>
<td>90%</td>
<td>41</td>
<td>109</td>
</tr>
<tr>
<td>PSO-based</td>
<td>80%</td>
<td>13</td>
<td>550</td>
</tr>
<tr>
<td>Split-Step PSO-based</td>
<td>82%</td>
<td>13</td>
<td>550</td>
</tr>
<tr>
<td>CBR (Manual Adaptation)</td>
<td>84%</td>
<td>13</td>
<td>825</td>
</tr>
<tr>
<td>IPM</td>
<td>91%</td>
<td>35</td>
<td>132</td>
</tr>
</tbody>
</table>

Analyzing table 1 shows that the training set size does not significantly affect the prediction rate. This finding is in line with Arditi et al. [4] findings in the ANN approach. However, this would be true when the training set is representative. Nevertheless, the CBR approach explicitly shows that sufficiently large number of cases is needed to create the case base [10]. It also quotes that these cases should vary in nature to cover a wide variety.

\(^4\) A classifying algorithm classifies raw input data into categories based on their relevance to the outcome.

\(^5\) Tools in WEKA software used to select training sets and attributes.
The selection of the construction dispute cases’ characteristics or attributes is a very important aspect of the prediction. Table 1 shows that a 90% prediction rate is not achieved with less than 35 attributes (IPM approach). However, an acceptable prediction rate of 89% is achieved using 12 attributes only through the same approach. Further analysis of the attributes selected in the later approach, and comparing these with the rest of the approaches shows that the most important 4 attributes are type of contract, type of parties involved in the dispute, directed employer changes and liquidated damages.

The reviewed approaches depend on the same basic principle, representing the attributes through binary format, which provides rough estimate. However, construction dispute characteristics are complicated and vague, which might affect the prediction accuracy. It would be more appropriate to consider dummy-coding techniques instead of the binary coding. Moreover, attorneys would tailor cases to the network in order to maximize the chances of entering court and winning the case. It might be needed to do adjustments to respond to the lawyer’s behavior.

Arditi et al. [4] and Arditi and Pulket ([6] and [7]) work is based on Illinois court cases between 1982 and 1994. Some of the greatest financial crises took place during that time span such as the black Monday in 1987 and the US loan crisis in 1989. Similarly, Chau’s work is based on Hong Kong court cases between 1991 and 2000 during which, the Asian financial crisis took place in 1997. Cooter and Kornhauser [13] have demonstrated that law undergoes a continuous change due to evolutionary forces. In fact, it is also proven that law never reaches a steady state, yet better laws prevail bad laws for greater time proportion. Through training the prediction algorithms, the reviewed approaches do not count for law changes over the respective time span. It is more accurate to divide the cases to sub-sets according to periods where law is steady, and train the algorithms using these sub-sets, separately. Furthermore, the reviewed approaches comprise limitations in the assumptions. Factors such as social, political, and psychological factors may have an effect on court decisions yet these have not been considered. Nevertheless, these studies’ results demonstrate that it is worthwhile pursuing this avenue furthermore and explore options to enhance construction disputes litigation predication.

5. Conclusion

Several litigation outcome prediction approaches in the area of construction disputes have been reviewed. The integrated prediction model, however, provides the highest prediction rate with relatively small training set. This will furnish the involving parties an alternative in assessing whether or not to take the case to litigation with a much higher confidence. It is found that the most important attributes are type of contract, type of parties involved in the dispute, directed employer changes and liquidated damages. As discussed, the prediction mechanisms of all of the reviewed approaches do not address the changing laws. Furthermore, the CBR approach in particular demonstrates a significant difference between involving or not involving the human brain input within the process of prediction. Hence, machines cannot yet replace human brain in the subject application. Yet, the current prediction approaches would serve toward decreasing the number of cases entering to the court lobby. Moreover, attorneys would tailor their cases to the network in order to maximize the chances of entering court and of winning their case.
Bibliography


Exhibit A - The input and output elements of the ANN model

Input Elements:
1. Parties Involved
2. Type of Plaintiff
3. Type of Defendant
4. Type of Counter-plaintiff
5. Type of Counter-defendant
6. Type of Third Party Plaintiff
7. Type of Third Party Defendant
8. Any Post-Trial Motion Filed
9. Resolution Technique Involved/Used
10. Type of Contract
11. Contract Value
12. Type of Designer used
13. Directed Changes
14. Constructive Changes
15. Radical Changes in Scope
16. Misrepresentation of Site
17. Unknown Site Conditions
18. Conditions Discovered in Pre-bid Site Exploration
19. Compensable Acceleration
20. Non-Compensable Acceleration
21. Compensable Delay
22. Non-Compensable Delay
23. Excusable Delay
24. Concurrent Delay
25. CPM Involved
26. Contractor Coordination
27. Supplier has Contract Directly with Contractor
28. Supplier has Contract Directly with Subcontractor
29. Estoppel Doctrine Involved
30. Subcontract Involved
31. Provision of Contract Involved
32. Claim for Material and Equipment Involved
33. Alternative Material and Equipment Used
34. Installation Requirements Satisfied
35. Misrepresentation of Supervision
36. Legal Interpretation of Contract Documents
37. Legal Interpretation of Drawings and Specifications
38. Technical Testimony (Quality of Work Performed)
39. Liquidated Damages Involved
40. Measure of Damages
41. Surety Bonds
42. Surety Assured
43. Non Payment
44. Late Payment
45. Lien Case Involved

Output Elements:
1. Affirmed
2. Reversed and Remanded

Circuit Court Decision
3. Owner
4. Contractor
5. Supplier
6. Architect/Engineer
7. Sub-contractor
8. Other
Current Issues in Construction Law in the Slovak Republic with Particular Emphasis on Present and Future Price Calculations and Budgets in Property Development and Other Construction Projects

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Introduction
The primary legislation governing all fundamental relations in the construction industry in the Slovak Republic is the Commercial Code (Act no. 513/1991 Coll. as amended). This code, which is intended chiefly for business entities, dates back to as early as 1991, when the Federal Assembly of the Czech and Slovak Federative Republic was still in existence. Since 1993 in particular, when an independent Slovakia and an independent Czech Republic came into being, what were at that time the new Commercial Code and rules governing legal relations in the construction industry (especially those contained in Sections 536 to 565 of the Commercial Code involving provisions on the Contract for Work) were expected to be short-lived from the social and legal perspectives. There was a tendency to view them more as temporary solutions amidst the creation of a full-fledged
market environment. Society was moving from a socialist and authoritative form of governing to a modern, market-based economy that ushered in a number of new and previously unknown business opportunities. The legislature of what was a fledgling state at that time had no experience with regulations that provided full support to private ownership, all forms of doing business and a pragmatic attitude of foreign investors. This is perhaps why, albeit somewhat surprisingly, all typical elements of a business environment were quick to take root in the Slovak Republic, and the Commercial Code and the Contract for Work continue to be (and are likely to remain well into the future) stable parts of the legal system and, you could even say, leading elements of the Slovak body of laws. While the Contract for Work has undergone only slight changes over the past two decades, its perception and interpretation have come a long way. These developments came on the heels of an exponential increase in the number of construction projects and related investment activities that over the past 25 years have changed several Slovak cities and towns beyond recognition. Especially western Slovakia and the capital, Bratislava, in particular have seen an outright construction boom, as over the course of time large multi-purpose complexes began to be built side-by-side both by Slovak and foreign construction companies which were intent on taking control of the newly-created market. Slovak construction companies have also begun to set their sights on projects abroad over the last decade, and several of them (e.g. construction company Doprastav, a.s.) have been successful investment-wise in public procurements in surrounding countries on a number of occasions. This process has produced several cases that have attracted media coverage and involved a failure to abide by or the bypassing of laws, which mainly led to non-transparent flows of funds and, naturally, overpricing of construction projects. The text below will seek to provide a concise explanation of the rules under commercial law that govern the creation of budgets in construction projects while highlighting selected examples when the actions of Slovak or foreign construction companies were rightly considered to be controversial from the legal and financial points of view, as has frequently been proved by Slovak courts or other statutory authorities. An analysis into this state of affairs also yields possibilities for a realistic estimate of where construction law in Slovakia and its surroundings is headed.

1. Contract for Work in the Commercial Code of the Slovak Republic

The Contract for Work has, from the point of view of application, an extraordinarily large-scale use in the Slovak legislation – the basic provision of this contract enables it to be employed for all activities that concern the creation of construction projects and construction activities. In the early 1990s, when Slovak entrepreneurs lacked sufficient knowledge of the use of the FIDIC rules, the Contract for Work along with the Contract of Sale were clearly the most frequently used type of contract in the Slovak business environment. To a great extent, this continues to be the case today, as Slovak entrepreneurs feel justifiably much more secure with the rules set forth by the national body of laws. In other words, they continue to prefer entering into contracts using the Contract for Work as stipulated in the Slovak Commercial Code than to make use of supranational rules (such as the aforementioned FIDIC). Against this backdrop, it needs to be made clear that the Contract for Work is also included in the other fundamental private-law code of the Slovak Republic – the Civil Code. Having said that, those provisions are only intended for non-business entities that usually conclude this type of contract with the aim of renovating or constructing buildings for other than business purposes (e.g. houses, new apartment buildings, repairs of existing structures, etc.). The Contract for Work under the Commercial Code is, by virtue of the Slovak legislation, designed for business entities including the state; for instance, government contracts for construction projects are at all times required to abide by provisions of the Commercial Code. In order to ensure appropriate transparency, all contracts signed between the state and its contractors (including when they concern construction projects) are required to be published in the
so-called central contracts register. This register significantly boosts transparency of the use of public funds and is another natural step in the economic and legal development of the Slovak Republic as a formerly socialist country.

2. Legislation Governing the Budgeted Price in Construction and Investment Projects in Slovakia – Theoretical and Practical Points of View

The legislation of each country should ideally be gradually made more precise and thereby improved, particularly when it comes to setting prices and inspections into the drawing of state funds. To this end, I will now deal with an interpretation of regulations governing price setting in the Contract for Work that, in the Slovak business environment, have given rise to many issues in practical application and provoked much public outrage, especially after the global economic crisis when public finances are under substantially tighter scrutiny than before.

The core provisions governing price setting in construction and investment projects are to be found in Sections 546 and 547 of the Commercial Code. Pursuant to these provisions, the price within each construction and investment project may be determined as a fixed price or through a price calculated on the basis of a budget calculated in advance. It is only natural for the price of property development or major construction projects to be determined using a detailed budget calculated in advance that, when involving major property projects, comprises an appendix that consists of several hundreds of pages attached to each counterpart of the contract concerned. On these grounds, the Slovak Commercial Code allows for a so-called non-binding budget to be agreed between the contract giver and the contract acceptor, or contractor, that is designed to enable a future adjustment to the price for the work in case a need arises during the performance of the work to carry out activities that the contractor could not possibly have envisaged even when exercising their professional due diligence. It is in the area of professional due diligence where practical application in the Slovak construction industry is accompanied by a number of question marks. There is a justified clash of opinions in specialized legal literature as to what may be subsumed under the obligation of the contractor (i.e. construction company) to act with professional due diligence, as the contractor (construction company) is considered by law to be a professional entity, that is a person with a full understanding of the prevailing situation in law and construction and thus has the obligation to account for all complications during construction work that may occur during the performance of the work.

Before I address selected practical experience of Slovak construction companies in national and foreign works contracts, please let me bring your attention to boundaries that must not be exceeded in adjusting the budget. Slovakia’s legislation governing the Contract for Work allows for the price for the work determined in the budget to be increased by 10 percent of the agreed sum at most, providing that the construction company has exercised all professional due diligence and – as mentioned above – could not, as a consequence, have reasonably assumed that the resulting cost of completing the structure would turn out to be higher. Such an arrangement is commonplace in the Slovak construction sector when the subject matter of the Contract for Work is a renovation of older structures such as churches, historical municipal offices, manor houses and so forth. Construction companies and contract givers (as per the examples above, the latter being usually the state), as well as courts and case law have agreed over the past few years that the complete and final cost cannot be determined objectively until a thorough inspection of the structures has been carried out. This usually presupposes the performance of some construction work (tearing down some walls, removing plaster from walls or several layers of paint, an in-depth review of the underlying soil and thus the building’s stability, uncovering the flexible parts of the roof undersides in order to enable the quality of the rafters to be inspected, etc.) that, naturally, is not carried out until after the respective Contract for Work is signed. If such ‘uncovered’ activities
and the related cost turn out to exceed the 10 percent of the agreed budget, then the parties to the contract have two options to consider – either the contract giver withdraws from the contract or accept an increase in the price set by the contractor. The first contingency requires that at least the work that the contractor has performed before the contract giver pulled out the contract be paid in full. In other words, the work will either remain unfinished or the contract giver will seek to find another, preferably cheaper, construction company. If the contract giver makes use of the second possibility, that is if they accept an increase in the budget by more than 10 percent of the initially agreed sum, then they cannot claim a reduction in the price later. In practice, contract givers often assent to an increase in the budget by 15 to 30 percent on the grounds that the construction company in question is well acquainted with project materials, the construction site in general and the terms and conditions of the contract. After considering all these variables, contract givers often prefer to ‘overpay’ instead of running the same risk with another company that would enter a project ‘in progress’. The increases in a budget towards the completion of a structure often trigger extreme situations, as recently evidenced by the construction of a new building housing the Slovak National Theatre in Bratislava, which started as early as the 1980s. It was envisaged that this would cost 874 million Czechoslovak crowns (in a ballpark figure at the present-day exchange rate and disregarding the inflation rate – this equates to some 3 million EUR) while the preliminary final cost based on generally available estimates in 2007 was approximately 5 billion Slovak crowns (which is equivalent to some 160 million EUR, excluding inflation in the calculation). Naturally, such a substantial change to the original cost was partly caused by the extremely long period of construction, as the new building of the Slovak National Theatre in Bratislava was not opened until 2007, or after 21 years of construction, as well as the impact of inflation and fundamental social and political changes embodied in the revolution in 1989 and the subsequent split of the Czech and Slovak Federative Republic and the emergence of an independent Slovakia on January 1, 1993. It is not for nothing that this structure has, with some irony, been dubbed ‘the oldest newly-constructed building’ in the Slovak Republic.

3. Slovak Construction Companies in Current Business Conditions

A fresh example of a Slovak construction company that, under the influence of optimistic prospects of the 1990s, painted ‘business rainbows brimming with bright colours’ is the aforementioned joint stock company Doprastav. Positive experience abroad prompted the company, which for long retained the leading position on the Slovak construction market, to vie for highly expensive contracts in Poland that concerned, among others, the Rzeszów – Jaroslaw A4 highway section. Following the unfavourable developments in the construction of this highway stretch, widely-respected Europe-wide media pointed out that Poland’s Directorate for Highway Construction consistently drew up poor-quality project materials that failed to consider, by way of example, existing engineering networks or the density of construction subsoil. Consequently, Doprastav had to tackle a number of difficulties that required many additional construction activities and supplies of material beyond the framework of the original agreement. Doprastav later claimed the performance of the work and material used through the so-called ‘claim management’, as the contractual relations between Poland’s Directorate for Highway Construction and the Slovak company Doprastav was based on the FIDIC rules. As the need to carry out extra construction work and to supply additional construction material resulted in protraction of the periods of construction of the individual A4 stretches, the Polish contractual partner applied contractual penalties to each invoice made out by Doprastav for delays in selected construction work. Doprastav was mired in a vicious circle, as problems arising in connection with the construction subsoil triggered increases in cost, while Doprastav was faced with a penalty in each of its requests for payment sent to the Polish partner for the failure to abide by the previously agreed construction work timetable. Do-
4. Conducting Major Construction Projects in Slovakia

A construction project that garnered similar media coverage in Slovakia to the ‘Doprastav case’ was the reconstruction of the Ondrej Nepela ice-hockey arena in Bratislava in anticipation of the IIHF Ice-hockey World Championship in 2011. Initially and for a long period of time, the Slovak Government was hesitant as to whether it should approve the building of a brand new arena on the outskirts of Bratislava as Slovakia’s capital or decide for reconstructing an old arena in the city centre. After an extensive discussion within all parliamentary political parties as well as among experts, the Government moved to endorse the latter option, or to reconstruct the existing ice-hockey arena instead of starting a new one from scratch. One of the chief lines of reasoning lay in a substantially lower cost of the reconstruction, which – at the initial, demolition stage and early construction stage – was estimated to reach around 40 million EUR. This was according to a statement by the Slovak Education Ministry dated April 14th, 2010, based on which the then Education Minister and the then mayor of Bratislava inked an agreement on a subsidy from the state budget. Under this agreement, the Education Ministry was to earmark approximately 26.5 million EUR as per the documentation submitted as evidence for the justified character of the requested funding towards the reconstruction of the ice-hockey arena. After several modifications, the total projected cost was presumed to reach a surprisingly high figure – 75 million EUR. Shortly after the IIHF Ice-hockey World Championship, however, 135 members of the Slovak Parliament (that is, including support from Opposition parties) voted for a probe into the funding of the reconstruction of the Ondrej Nepela Ice-hockey Arena in Bratislava by having the inspection carried out by Slovakia’s Supreme Audit Office. This was primarily due to the fact that, once the ice-hockey tournament was over, it transpired that the arena’s reconstruction ultimately cost over 96 million EUR. The difference in the cost between initial projections and the actual final figure was a lesson for the Slovak Government and potential foreign investors who, understandably, tread carefully vis-a-vis a possible construction failure and potential negative reaction that an increase in the cost may elicit and that may then circulate in unrestrained fashion especially among the online editions of major European periodicals. The Slovak Government exhibits a similarly wavering attitude when mulling over multiple versions of proposals for the construction of a national football stadium, which reflects badly not only on Slovak sports, but also on Slovakia as a European Union member country.
5. Conclusion

Slovak construction companies as contractors, of the one part, and the Slovak Government as a contract giver of the other part, are learning the hard way in construction projects even close to a quarter of a century after independent Slovakia came into being. Construction and investment projects within the country for a long time made use of the Contract for Work as regulated by the Commercial Code, but, for obvious reasons, foreign investors lacked sufficient knowledge about this and preferred the FIDIC arrangements instead. On the other hand, Slovak businesses (the previously mentioned Doprastav) lacked sufficient experience with the application of the FIDIC rules and, as a result, some construction companies, found themselves in a ‘pre-bankruptcy stage’. Slovak construction law, property developers and investment and construction activities have reached a stage at which, based on their empirical experience (at times painful), they are all but set gradually to gain a firmer foothold when it comes to the pitfalls of international contractual relations in particular, which pose what appears to be a suitable alternative comprising the use of the FIDIC rules and an arbitration clause of an independent and qualified arbitration court that would preclude a tendentious perception of facts by general courts in the country of the contract giver.

Footnotes:
1. A provision of Section 536 of the Slovak Commercial Code, second paragraph, reads as follows: Work shall be understood to mean the execution of a certain item unless it falls within the scope of a contract of sale, the assembly of a certain item, maintenance thereof, the performance of a repair or modification of a certain item based on an agreement or a tangible result of another activity. Work shall always be understood to mean the execution, assembly, maintenance, repair or modification of a structure or part thereof.
2. The Central Contracts Register containing contracts concluded with the state is subject to public scrutiny in Slovakia, involving free access to the contents of the website https://www.crz.gov.sk.
4. The widely respected Slovak weekly Trend used the expression „Polish Downfall of Doprastav“ in one of its issues in April 2014 (http://www.etrend.sk/trend-archiv/rok-2014/cislo-13/polska-skaza-doprastavu.html). Against this backdrop, it is worth citing a statement by analyst of Polish consultancy PMR for construction Katarzyna Bednarz that was published in the Slovak media on April 7, 2014: „It’s well known that the relations between Polish suppliers and this investor are very tense, and it’s difficult to say who is to blame. Project documentation often isn't of high quality, which requires modifications during the performance of work. Such modifications result in additional costs and time requirements, which isn’t always accepted by the investor. The analyst's statement is available, for example, at: http://www.vyvlastnenie.sk/clanok/a/polska-skaza-doprastavu

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Relations between internal market freedoms and fundamental rights in the aspect of globalizing world and construction law

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Introduction

Human societies across the globe have established progressively closer contacts over many centuries, but recently the pace has dramatically increased. Jet airplanes, cheap telephone service, email, computers, huge oceangoing vessels, instant capital flows, all these have made the world more interdependent than ever. Money, technology and raw materials move ever more swiftly across national borders. As a result, laws, economies, and social movements are forming at the international level.

Many politicians, academics, and journalists treat these trends as both inevitable and (on the whole) welcome. But for billions of the world’s people, business-driven globalization means uprooting old ways of life and
threatening livelihoods and cultures. The global social justice movement, proposes an alternative path, more responsive to public needs.

**Main body**

Business law is globalizing fastest of all, as nations agree to standard regulations, rules and legal practices. There are number of technology developments that clearly have their direct reflection and affect on the construction industry. It is almost trite to note that the world economy is becoming globalized and that this is affecting the construction industry. However, people have different views on the subject. Developing countries represent substantial new markets in areas in which local industry capacity may be inadequate to meet demand. Construction law is closely related to contract law, which is the main source of development of market economy. In this aspect construction law, construction market and market economy are closely related to the business sphere and environment, undividable part of which comes to be market freedoms.

The relations between internal market freedoms (the so-called „fundamental freedoms”) and fundamental rights is a recurring question in EU law1. In recent years, after rulings, such as Schmidberger, Omega, Viking, and Laval, attempts to provide a framework for approaching and resolving clashes between fundamental freedoms and fundamental rights, have acquired a special urgency2. The dominant focus in the literature is on what happens when free movement and fundamental rights pull in different directions. Yet, the question of whether fundamental freedoms should be regarded as fundamental rights also deserves close scrutiny. It is especially important to understand the implications of this classification since the EU Charter of Fundamental Rights appears to treat some, but not all, fundamental freedoms as fundamental rights3. The view that fundamental freedoms should be linked to fundamental rights, as we have seen, is buttressed by the introduction of EU citizenship, which has placed individuals qua citizens at the heart of free movement law. This brings us to the second thesis, which we have named the convergence thesis, as it encapsulates the views of those who see in that link a strong argument in favor of convergence between the four freedoms. The other crucial contention that can be derived from this view is that it – apparently – allows one of the traditional constraints of free movement law – the wholly internal rule – to be loosened. In particular, the Charter seems to regard the free movement of persons4 and services5 as fundamental rights, but not the free movement of goods or the free movement of capital. A similar approach is exhibited in the case law: while the Court recognizes the fundamental rights character of free movement of persons, it does not appear to extend that characterization to the entirety of free movement law. Though the problem of free movement comes to be the most important in the globalizing world it seems to consider that the solution is to some extent found in Case law. The problem of free movement is to some extent attracted in EU directives, which led to solve especially the problem of free movement of capital, services and goods. „Free movement of persons, services and capital”. The regulation currently in force, i.e. Article 49 of Treaty on the Functioning of EU (hereinafter TFEU) „restrictions on the freedom of establishment of nationals of a Member State in the territory of another Member State shall be prohibited”, has not changed since 1957, when these rules were first established, however it could fairly be stated, that it has

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4 Id. art. 45, at 19.
5 Id. art. 15, at 11.
not yet produced its full effects\(^6\). The present article actually has the problem to analyse and clear up the problems of free movement in the aspect of developing globalizing world especially in the sphere of construction law, taking into account the wide range of use of construction services in the modern world. We actually analyze the most recent European developments of the company mobility, starting with the principle established by the European Court of Justice in the Daily Mail case (paragraph 19)\(^7\) according to which the States are the only ones capable of determining the rules concerning the registration of companies: in that regard it should be borne in mind that, that unlike natural persons, companies are creatures of the law and, in the present state of Community law, creatures of national law. They exist only by virtue of the varying national legislation which determines their incorporation and functioning. Without mentioning the whole body of case-law of the European Court of Justice, it must be underlined that in the unseen competition between the EU institutions, the Court of Justice has had a fundamental role in the definition of content (a recent example is Winner Wetten Case\(^8\)) or boundaries of the freedom of establishment in relation to national law (for example the Cartesio case\(^9\)). In nowadays construction service development the problem has the wide discussion taking also into account the fact of establishment of companies around EU territory. For many years the market economy and international trade, construction industry were developing in national level, and there was no tendency to go abroad, across the borders of national level. But as it was mentioned above, the globalization had its direct influence on market economy and in nowadays life the problems of clear legal regulations concerning the internal market as well as in construction industry have the greatest importance, especially taking into account the fact of importance of construction law and legal regulations in construction industry. Though, it might be honest to mention, that main problematic issues, related to internal market and market economy, also have their direct influence on construction industry. In this aspect we are closely relating to the problem of establishment of construction companies in multinational/transnational/level as a consequence of globalized trends of development. The problem of transnational corporations and legal regulation in this aspect came to be matter of discussion for many years. The gradual changes in production process during 20th century, development trends in market economy consequently led to importance of having conceptual approach towards legal persons in international private level, that is to say to multinational/transnational/corporations. These type of companies carry out the following activities:

- by entering other countries’ economic framework, they affect on legal customs and influence on creating flexible emergency mechanisms,
- by taking activities in different countries, they include not only economic, but also human resources and intellectual potential,
- carry out an industrial activities, for the purpose of engaging not only cheap labor, raw materials, but also production technologies\(^10\).

Article 50 of Civil Code of RA defined legal persons as: «A legal person is an organization that has separate property in ownership and that is liable for its obligations with this property and that may, in its own name, acquire and exercise property and personal non-property rights, bear duties, and be a plaintiff and defendant in court. A legal person must have an independent balance sheet. In connection with participation in the formation of the property of a legal person, its founders (or participants) have or do not have rights under the law of obligations with respect to this legal person. Legal persons with respect to which their founders (or


\(^10\) К. Войлерт. Транснациональные корпорации вне правового поля: действие международно-правовых стандартов и его пределы. Германия, 2012, Рp 75-78.
participants) have rights under the law of obligations include: business partnerships and companies, and also cooperatives. Legal persons with respect to which their founders do not have rights under the law of obligations include: societal amalgamations, funds, and unions of legal persons».

Construction industry development brings with it importance to discuss the problem of transnational corporations as well, as special legal entities, which have direct influence on market economy by their nature and character. In the aspect of the discussing problem the transnational corporations some times are being understood as branches or representatives, but it must be fare to mention that in legal understanding branches and representations are others than legal persons. In construction activity and nowadays trends of development the problem of transnational corporations is of greatest importance. The unique approach to transnational corporations comes from the fact, that, by their nature of actions, they actually promote international relations, not taking into account the fact, that they have different legal systems as ethnicity and place of business. The problem of exact legal status of transnational corporations, in legal doctrine and practice is in direct influence from the fact of absence of comprehensive regulatory mechanism. It seemed, that the „Convention on transnational Corporations”, adopted in 1998, which actually came to follow the CIS 1994 Convention on „Industrial, commercial, credit, insurance development creation” actually was able to solve the problems. However, it could solve only part of the problem concerning the legal status of Corporations. Many scientific sources, by trying to analyse the problem special or specific solutions to the problem, by adopting special legal act, which would led to making exactness to the status of companies established in multinational level. This approach met different discussions in scientific level, and led to importance to bring another solution to the problem, which could be only formation of new branch of law, such as transnational law, which would give exactness to the problematic issue. Essentially, the solution of the problem of legal status of transnational corporations, could be found only in adoption of comprehensive legal act, which would in details describe the ways of solution of the issue. The specification of legal status of transnational corporations meets different approaches in legal litarature. From the one hand, it comes to be of greatest importance the adoption of legal act, which would reguluate legally all the questions, concerning the issue, from the other hand, the legal doctrine also presents new way: «Transnational law» as separate branch of study, which would define transnational corporations as specially characterized unit with all its’ kew questions and answers to them.

**Conclusion**

Essentially, transnational law comes to be a synthesized environment, where the collision of public and private disciplines can be clearly seen. In this aspect, we have the main problematic issue in construction industry through globalizing internal market, exact legal status of construction companies established in multinational level. AS the practice shows, if no legal regulation, than we can face to very serious problems, which will led not only to civil, but also to tax law sphere.

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I. One of the solutions at hand for the Arbitral Tribunals or national courts, in case it finds that the DAB procedure is mandatory as a pre-arbitral procedure, is to stay the proceedings and request the parties to address their dispute to the DAB. This was the case in Peterborough City Council v Enterprise [2014] EWHC 3193 TCC.

In this case, given that clause 20.2 provided for ad hoc DAB appointments, the judge accepted EMS’s argument and agreed with the fact that the contract required the determination of the dispute through DAB adjudication prior to any litigation. Moreover, the judge acknowledged that DAB decision might be “rough and ready” but as far as the parties had agreed to incorporate the FIDIC DAB mechanism into their contract, the mechanism has to be observed. Accordingly, the judge ordered that the court proceedings were to be stayed until a decision of the DAB is reached in the case.

II. In some cases, Arbitral Tribunals reached the same result as previously presented — the optional character of DAB procedure — but for a different reasoning — the grammatical interpretation of the provisions of clause 20 FIDIC. This solution was reached in Decision no. 76/2015, Court of International Commercial Arbitration attached to the Chamber of Commerce and Industry of Romania.

In this case, the Arbitral Tribunal stated that the services of the Dispute Adjudication Board are not mandatory for the parties in accordance with the contractual provisions. In accordance with the provisions of the General Conditions of Contract and the Special Conditions of Contract, parties can choose to address their dispute to the DAB if they consider that a dispute has arisen. If the contractual provision uses the wording “may”, this means that the provision is not mandatory and the party has the ability to choose whether to go or not to the DAB. If the procedure in front of the DAB were to be mandatory as a pre-arbitral procedure, it would have been used an imperative term as “will” or “must”. But, if the Special Conditions of Contract does not oblige the parties to seize DAB before filling an arbitration request, this means that parties have a free will in choosing or not to follow the procedure in front of the DAB. This is why it cannot be considered that Claimant filled premature claims in arbitration.

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Solutions in this area were divided in two categories: the first category characterized with more rigid solutions such as stay of the proceedings until the decision of the DAB is reached, and the second category characterized by flexible decisions which consider the optional character of DAB. As it can be observed from the above, both in Romanian and foreign case law, the tendency is to reach more and more flexible solutions with regard to the mandatory/optional character of the DAB in the sense of accepting jurisdiction of a claim in arbitration even in case parties did not previously addressed their dispute to the DAB. The issue of the DAB procedure remains a controversy. However, Arbitral Tribunals and even national courts are more open in reaching decisions in the advantage of the parties and in accordance with the idea of unblocking the issue and cost-effectively solve the dispute.
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The abstract should consist of no more than 800 characters (with spaces), written in Times New Roman, 10, single spaced, justified. Leave one blank line between the institutional affiliation and the body of the abstract.
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The text of the actual paper should be no longer than 10 pages, including bibliographical references, illustrations, charts and/or maps.
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