

THE COMPARATIVE LEGAL ANALYSIS OF THE EUROPEAN AND BELARUSIAN LAWS CONFLICT WITHIN THE SPHERE OF CONTRACTUAL OBLIGATIONS

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Представлен компаративный правовой анализ европейского и белорусского коллизионного права в сфере договорных обязательств, показаны недостатки отечественного правового регулирования: отсутствие дифференциации правового регулирования, механизмов ограничения применения иностранного права и др.

The article tackles the comparative legal analysis of the European and Belarusian Laws conflict within the sphere of contractual obligations. The author's objective is to demonstrate the detriments of the domestic legal rule: absence of differentiation of rules, delimitation of border mechanisms restriction of the foreign domestic law application, etc.

Ключевые слова: выбор права; коллизионная норма; договорные обязательства; дифференциация правового регулирования; механизмы ограничения применения иностранного права; принцип тесной связи; международное частное право.

Keywords: choice of law; conflict of laws; contractual obligations; differentiation of rules; principle of the closest connection; private international law.

Taking into consideration the absence of real material unification in certain spheres, it is no wonder that the conflict of law unification, I. E. the establishment of uniform rules of applicable law in different states, is a unique method of legal drawbacks elimination. The normal functioning of the internal market creates a need, in order to improve the predictability of the outcome of litigation, certainty as to the law and the free movement of judgments, for the conflict law rules in the member states to designate the same national law, irrespective of the country of the court in which an action is brought [9, p. 6 of Preamble].

While accepting legal acts, the EU bodies should be based on the concrete provisions of the Treaty, endowing them the corresponding authorities – a so-called principle of “special authorities”. The EU primary law practically does not contain norms which can form a basis for legal integration in the conflict law sphere. The only provision indirectly regulating this problem is Article 220 of the Treaty of Rome (in present edition – Article 293) which governs an opportunity for the states to negotiate on the conclusion of international agreements only in two spheres: international corporate law and international civil process. Cooperation in the field of international treaties conclusion did not lead to a significant result. Both the Convention on the Mutual Recognition of Companies and Bodies Corporate signed on 29 February, 1968 and the Convention on Insolvency Proceedings concluded on 23 November, 1995 have not yet come into force. Nowadays, legal regulation in this sphere is carried out within the EU secondary law [11; 12; 13].

The Directives of the Community contain the solitary unilateral conflict rules which are dedicated

to the consumers' rights protection, insurance and etc.

The Convention on the Law Applicable to Contractual Obligations adopted on 19 June, 1980 (hereinafter – the Rome Convention) is not the European one in the strict sense, though the Community took an active part in its drafting [8]. At the same time, this Convention constitutes the actual basis of present European treaty conflict law.

A significant part of the doctrine considers the Rome Convention to be one of the most successful examples in the sphere of conflict law unification. It has greatly influenced the development of international private law in many countries beyond the EU, including the international private law legislation of the Russian Federation. At the same time, the practice of the Convention application caused certain difficulties. One of the main law enforcement problems is that at the present time there is no full-fledged uniform interpretation mechanism of the Convention because the Second Additional Protocol to the Convention responsible for the delegation of powers to the European Court on uniform interpretation of the Convention has come into force only after its ratification by Belgium in August, 2004. Despite the requirements of Article 18 (“Uniform interpretation”) of the Convention, its interpretation was not uniformly carried out by the participants. Moreover, in certain cases the courts of the member states came to opposite decisions [8]. The content of international treaty was also rebuked in the doctrine. Some treaty provisions were criticized for too flexible criteria of close connection definition (Article 4 of the Convention), for the permissive character of the rule contained in Article 7 (1. It concerned an opportunity of the

court apply overriding mandatory provisions of the state with which the situation has a close connection and Article 10 (1), regarding the sphere of *lex causae* application, quite a tough character of rules in Article 5, concerning protection of the consumers' rights. Such complaints have led to the necessity of the Convention, reforming, which was discussed both in the doctrine, and in the body of the legislative initiative – the EU Commission.

Article 26 of the Rome Convention contains the revision mechanism. The legislative initiative right on this question has any member state on demand of which the President of the EEC Council convenes the conference. However, the long-term ratification practice of the Convention and its Protocols required the application of more efficient mechanisms; the legal basis had been established in the Amsterdam Treaty, which entered into force in 1999. Under Articles 61 and 65 of the Amsterdam Treaty the competence in the sphere of international private law has been handed over from the third pillar – the European Union to the first one – the European communities. That allows to regulate conflict law matters by means of the European law sources: Directives and especially Regulations as acts of direct effect.

European law already has examples of successful international treaty transformation into the Regulations. The Brussels Convention on Jurisdiction and the Enforcement of Judgments in Civil Matters Concerning Jurisdiction and Compulsory Execution of Judgments of 27 September, 1968 has been replaced by several Regulations representing the European international civil process [3; 10].

The replacement of the Rome Convention by the Regulation “Rome I” allows to achieve some important goals, in particular:

- *to improve the content of conflict rules in the treaty law sphere* by putting into operation the improved range of conflict law rules applied in the case of absence of the law chosen by the parties;

- *to enlarge the application sphere of the uniform EU conflict law norms in the field of the treaty law*, in particular, by including special rules on the definition of the law applicable to an insurance contract;

- *to simplify and democratize the amendment procedure* directed on the further EU conflict law rules improvement in the field of the treaty law: in contrast to the Rome Convention, the Regulation “Rome I” is to be adopted and amended according to the joint decision-making legislative procedure, demanding the consent both the European Parliament as the EU institute made up of members directly elected by the EU citizens and the Council of the European Union as the EU institute consisting of the national governmental representatives, making a decision by

the qualified majority (i. e. In the absence of veto right among certain member states);

- *to establish a uniform judiciary practice (case law) on the basis of the EU Court decisions*, giving the legal interpretation of the Regulation “Rome I” including the European Commission claims against member states breaking its rules, and on inquiries of national courts [2].

The final text of the Regulation “Rome I” (EC) № 593/2008 of the European Parliament and of the Council on the Law Applicable to Contractual Obligations of 17 June 2008 (hereinafter – the Regulation “Rome I”) and applicable to contracts concluded after 17 December 2009 has essential differences, both from the Rome Convention content and from the text of the Proposal for the Regulation presented by the EU Commission on 15 December, 2005.

The Regulation “Rome I” is based on the main principles which are quite close to Belarusian legislator approaches in the field of legal regulation concerning the conflict law matters on contractual obligations.

The International private law is a rather young branch of Belarusian law. During the Union of the Soviet Socialist Republics' existence the possibility of civil relations involving foreign element to emerge was inappreciable because there were no prerequisites and basis of the development and adoption of legal rules in this sphere, law-enforcement practice rarely came into collision with the necessity of the disputes' settlement in this field. However, we shouldn't assert that the republican system lacked the international private law in Belarus at all. The Civil Code of the Belarus Soviet Socialist Republic contained Section VII “Legal capacity of foreign nationals and stateless persons. The application of foreign civil laws and international treaties”. This Section consisted of 12 articles containing legal regulation of legal capacity and capability of foreign nationals, foreign enterprises and organizations; law, applicable to the form and the content of a contract, the property law, the law of torts and the succession. Thus the general international private law theoretical matters (qualification of legal terms, renvoi and renvoi to the third country law, rules of direct effect and etc.) remained beyond the legislator vision and were resolved in the doctrine¹. Only the public policy (“Ordre public”) was set forth in the Civil Code of Belarus Soviet Socialist Republic (Article 563).

The situation has radically changed after the new Civil Code of the Republic of Belarus (hereinafter – the Civil Code) was adopted on 7 December, 1998. This legal act worked out on the base of the Model Civil Code of the Commonwealth of Independent

¹ There was no Belarusian doctrine in international private law sphere at the Soviet Union time as the authority was extremely centralized. The international private law doctrine had a Russian “nationality” [7].

States (hereinafter – CIS) and adopted by the Inter-Parliamentary Assembly of CIS is quite modern. Section VII of the Civil Code is called “International private law” and composed of already 42 articles. It is worth noting that Belarusian legislator perceived modern legal tendencies in most international private law problems. At present most moot points of international private law general part have been regulated: qualification of legal terms, renvoi, overriding mandatory provisions, evasion of law and foreign law content determination. *Lex personae* are a determined different: *lex patriae*, *lex domicilii*, the law of the country with which a person most closely connected, the law of the state granted asylum. The legal issues of international private law special part were fixed throughout complex regulation. Certain rules regulating the law applicable to the passing and protection of property, the property law on certain categories of objects (cargo in transit, property subjected to registration) have appeared. The Belarusian law contains detailed and passing modern tendencies regulation of law applicable to contractual obligations: Articles 1124–1125 of the Civil Code perceive the approach offered by the Regulation “Rome I”, while, for example, international treaties within the Commonwealth of Independent States set forth *lex loci contractus* – an obsolete conflict law rule nowadays, as the basic subsidiary principle of the law applicable to the contract. Law applicable to non-contractual obligations, inheritance, the form and the content of the will has also received complex and detailed regulation.

The negative feature of new international private law legal regulation in Belarus is a certain archaic rules passed from the Soviet legal acts (for instance, obligatory written form provided for foreign trade contract when one of the parties is a Belarusian subject), inclusion into the Civil Code text the provision concerning invalidity of a contract concluded in evasion of law (Belarusian or foreign), as well as extremely limited sphere of freedom of choice application – it applies only in regard to contract field. The regulation of family relations fixed in the Family Code of 9 July 1999 in an edition of 23 June 2008 also falls short of modern tendencies in this sphere.

Basic provisions for contractual obligation regulation within the European and Belarusian conflict law will be compared further.

Freedom of choice (*lex voluntary*) is the indisputable predominant the principle in all international treaties being examined in the present research. The uniform standpoint is taken with respect to the expression of will: the choice would be made, expressly or clearly demonstrated by the terms of the contract, or the circumstances of the case. By their choice the parties can select the law applicable to the whole or a part only of the contract.

At the same time, in all documents, there is a distinction in the interpretation of “presumed intention of the parties”. Both the Rome Convention and the Civil Code of the Republic of Belarus do not consider the choice of competent jurisdiction made by the parties to be a choice of law. On the contrary, under the Proposal for the Regulation “Rome I” a provision on jurisdiction has the additional presumption declaring in favor of applicable law choice, and therefore significantly facilitating its choice. The final text of the Regulation is more discreet at this issue: such consent of the parties should be one of the factors which are to be taken into consideration in order to define whether the choice of law was obviously expressed. Thus, having abandoned both the non-recognition of jurisdictional reservation as the competent choice of law and order and unambiguous identification of jurisdiction, choice and choice of law the Regulation made a “judgment of Solomon”. It seems that forenamed problem should be resolved by a court on the basis of the case circumstances.

In the Regulation “Rome I” it is not prohibited for the parties to include in their contract the reference to a non-governmental law, i. e. non-obligatory acts of intergovernmental and governmental organizations (for example, UNIDROIT Principles of International Commercial Contracts, Principles of the European Contract Law, INCOTERMS, I. E. the sources of *lex moratoria* and rules of international treaties.

In the absence of a choice of applicable law the Regulation “Rome I” uses the approach different to that established in the Rome Convention. European legislator refused to apply the law of the country with which legal relationship most closely connected as the main subsidiary principle of contractual obligations. European law directly indicates the law applicable in particular contractual types:

1) a contract for the sale of goods shall be governed by the law of the country where the seller has his habitual residence;

2) a contract for the provision of services shall be governed by the law of the country where the service provider has his habitual residence;

3) a contract relating to a right *in REM* in the immovable property or to a tenancy of immovable property shall be governed by the law of the country where the property is situated (with the exception of a tenancy of immovable property concluded for temporary private use for a period of no more than six consecutive months shall be governed by the law of the country where the landlord has his habitual residence, provided that the tenant is a natural person and has his habitual residence in the same country);

4) a franchise contract shall be governed by the law of the country where the franchisee has his habitual residence;

5) a distribution contract shall be governed by the law of the country where the distributor has his habitual residence;

6) a contract for the sale of goods by auction shall be governed by the law of the country where the auction takes place.

The contracts undisclosed by the Regulation “Rome I” shall be governed by the law of the country where the party required to effect the characteristic performance of the contract has his habitual residence. But if it is clear from all the circumstances of the case that the contract is manifestly more closely connected with another country, the law of that state shall apply.

The Regulation rules concerning the law applicable to consumer contracts are worthy of a high opinion. The Regulation “Rome I” contains the compromise between the Rome Convention approach and the Proposal for the Regulation and proceeds from the balance maintenance of consumer interests. Firstly, the principle of freedom of choice removed from the Proposal for the Regulation remains in the Regulation “Rome I”, though the basic conflict rule is the law of the country where the consumer has his habitual residence, provided that the professional pursues his commercial or professional activities in the country where the consumer has his habitual residence, or by any means, directs such activities to that country or to several countries including that country. Secondly, the consumer is being protected as a weak party to a contract by means of the prohibition of overriding mandatory provisions in force in the country where the consumer has his habitual residence. Thirdly, there are some exceptions to aforementioned rules: a contract relating to immovable property; a contract for the supply of services where the services are to be supplied to the consumer exclusively in a country other than that in which he has his habitual residence; a contract of carriage other than a contract relating to package travel within the meaning of Council Directive 90/314/EEC of June, 13, 1990 On Package Travel, Package Holidays and Package Tours.

In the conflict law of Belarus we have the similar approach to the applicable law. The Article 1125 of the Civil Code defines the law applicable to the contracts in the absence of choice as well as declaring the law applicable to 15 contract categories:

1. Law of the seller – in a contract for the sale of goods.
2. Law of the landlord – in a contract of tenancy.
3. Law of the lender – in a contract of loan.
4. Law of the commission agent – in a contract of commission.
5. Law of the law agent – in a contract of agency.
6. Law of the guarantor – in a contract of guarantee.
7. Law of the grantor – in a contract of grant.

8. Law of the contractor – in a contractual agreement.

9. Law of the carrier – in a contract carriage.

10. Law of the forwarding agent – in a contract of forwarding.

11. Law of the custodian – in a contract of custody.

12. Law of the depositor – in a contract of the deposit.

13. Law of the insurer – in a contract of insurance.

14. Law of the creditor – in a contract of debt.

15. Law of the licensor – in a license contract on the exclusive right use.

Thus, basic distinctions between European and Belarusian conflict law regulation in the contractual obligations field lie in the following. Firstly, the Belarusian legislator does not designate concrete law applicable to a franchise and a distribution contract. Secondly, application of the law of the country where the immovable property is situated with regard to contracts when a property appears to be a subject of a contract, as well as to contracts of trusting management is governed by overriding mandatory provisions, I. E. the freedom of choice principle shall not apply which is contrary to European law. Thirdly, the Belarusian law applies the law of the country where the auction takes place (or law of the country of the exchange location) to any contracts concluded on such auctions or exchanges, but not only to contracts for the sale of goods.

Furthermore, Article 1125 of the Civil Code betakes *lex loci solutionis*. For instance, according to paragraph 3, in the absence of an applicable law choice of the joint activity contracts; to construction, fitter’s and capital construction works the law of the country where this activity takes place or the results provided by the contract are being produced is to be applied.

It is necessary to pay attention to changes made in the Regulation “Rome I” final text in comparison with the Proposal for the Regulation. So, the Regulation does not define the law applicable to contracts concluded by an agent (agency contracts) and to contracts relating to intellectual or industrial property rights. It can be presumed that the European legislator, considered a problem of definition of the law of the place where the party performing the service characterizing the contract has his habitual residence to be an obvious issue. However solitary participants of the 1978 Hague Convention on the Law Applicable to Agency as well as complex structure of agency legal relationship (existence of internal and external relations), different doctrine approaches and law enforcement practice of the Community member states make the matter of applicable law detection with respect to such legal relationship rather complicated. Both the French doctrine and solitary judicial practice

proceed from the same conflict law rule – *lex loci solutionis* [1; 4] – which arises from the combination of the contract of commission and the contract of representation. The English doctrine supports the application of various conflict law rules regulating internal and external relations: the law of the country where an agent exercises his main activity and *lex causae*.

Article 5 of the Regulation “Rome I” is dedicated to the contracts of carriage. As it is also provided in the text of the Rome Convention, in the absence of choice of applicable law the main subsidiary conflict law rule will be the law of the country of habitual residence of the carrier, provided that the place of receipt or the place of delivery or the habitual residence of the consignor is also situated in that country. However, unlike the Rome Convention the Regulation “Rome I” proceeds from the necessity to apply the law of the country where the place of delivery as agreed by the parties is situated, if the aforesaid requirements are not met. Paragraph 2 of this article contains an innovation unknown both to the Rome Convention and the Proposal for the Regulation “Rome I”, which concerns the law applicable to a contract for the carriage of passengers in the absence of applicable law choice. For instance, the applicable law to a contract for the carriage of passengers is the law of the country where the passenger has his habitual residence, provided that either the place of departure or the place of destination is situated in that country. If these requirements are not met, the law of the country where the carrier has his habitual residence shall apply. Moreover, the Regulation “Rome I” sets forth the restrictions regarding the freedom of choice principle defining the rule that the parties may choose as the law applicable to a contract for the carriage of passengers only the law of the country where the passenger has his habitual residence; or the carrier has his habitual residence; or the carrier has his place of the central administration; or the place of departure is situated; or the place of destination is situated. At the same time where it is clear from all the circumstances of the case that the contract, in the absence of a choice of law, is manifestly more closely connected with another country, the law of that country shall apply.

Article 7 “Insurance contracts” of the Regulation “Rome I” is an example of extremely differentiated conflict law rule. Firstly, it shall be applied to all insurance contracts, except for reinsurance; to contracts covering risks situated inside the territory of the member states; while to insurance contracts covering large risks as defined in Article 5(d) of the First Council Directive 73/239/EEC of 24 July 1973 on the Coordination of Laws, Regulations and Administrative Provisions Relating to the Taking-up and the Pursuit of the Business of the Direct Insurance other than Life Assurance –

regardless the fact whether the risk covered is located in a member state or not. The European legislator provided an opportunity for parties to choose any applicable law only with regard to the last type of the insurance contract. When the applicable law has not been chosen by the parties, such type of the insurance contract shall be governed by the law of the country where the insurer has his habitual residence.

In other types of insurance contracts the contracting parties are free to choose only the alternatives contained in Article 7 (3) of the Regulation “Rome I”. Moreover, the member states referred to grant greater freedom of choice of the law applicable to the insurance contract may take advantage of that freedom. If the parties did not designate the applicable law, such a contract shall be governed by the law of the country in which the risk is situated at the time of conclusion of the contract (for instance, the law of the country where the property is situated, the law of the country where the vehicle is registered, *lex loci contractus*, the law of the country where the insurer possesses his habitual residence, etc.).

European conflict law regulation of the individual employment contracts did not undergo serious changes in comparison to the text both of the Rome Convention and the Proposal for the Regulation “Rome I”, with the exception of the fact that conflict law rules formed up the hierarchical system (the law of the country where the place of business through which the employee was engaged is to be applied if it is impossible to determine the country in which or, failing that, from which the employee habitually carries out his work in performance of the contract regardless of the fact that he carries out his work in several countries).

The last problem within the present research is the analysis of restriction mechanisms provided for foreign law application both in the European and Belarusian law. We must not expect changes in the content of public order reservation while its definition is invariable in all legal acts in private international law field. Meanwhile, certain changes have touched upon the overriding mandatory provisions institute.

Firstly, the terminology modification should be evaluated positively. Former legal acts (official texts in English) did not make a distinction between mandatory rules and overriding mandatory provisions which are to be applied in spite of the fact that legal relation is governed by foreign law. The Belarusian law also contains such a contradiction in Article 1100 of the Civil Code.

Secondly, unlike the Rome Convention the text of the Regulation “Rome I” contains the definition of overriding mandatory provisions being determined as the provisions the respect for which is regarded as crucial by a country for safeguarding its public interests, such as its

political, social or economic organization. Such a statement is probably based on the position of the European Court of Justice formulated in the well-known *Arblade* case decision of 23 November 1999: “The mandatory rule (*Loi de police*) must be understood as applying to national provisions compliance with which has been deemed to be so crucial for the protection of the political, social or economic order in the state concerned as to require compliance therewith by all persons present on the national territory of that state and all legal relationships within that state” [5]. Unfortunately, the Belarusian law contains an omission on this issue that adversely affects law enforcement practice as a judge faces a problem of extracting such rules out of all legal normative body. In the case when overriding mandatory provision does not contain a qualificatory element (under territorial or subject criterion), determination of its legal nature appears to be rather difficult. The absence of precise criteria on referring foreign rules to the overriding mandatory provision involves very large freedom of the court in certain circumstances which result in inconsistency and ambiguity application of such rules.

Thirdly, it is necessary to pay attention to a range of the overriding mandatory provisions falling under the Regulation “Rome I” scope. It is common knowledge that the Rome Convention set forth the obligation of member states courts apply the overriding mandatory provisions *lex fori* and endowed the courts with the right to apply the overriding mandatory provisions of the state with which a contract is most closely connected. The problems of overriding mandatory provision qualification became a reason to reserve the right not to apply the provisions of Article 7 (1) at the time of signature, ratification, acceptance or approval of the Convention. Great Britain, Ireland, Luxembourg

and Germany enjoyed this right offered by the developers of the Convention in Article 22 (1) (a). Particularly, the draft of the Introductory Act to the German Civil Code in its first version contained the provisions based on Article 7 (1), but they have faced impetuous debates and it was decided to reserve the right for non-application of Article 7 (1) of the Rome Convention (though in practice courts sometimes applied this mechanism). The above-mentioned problems have been removed from the Regulation “Rome I” as its rules have a direct effect and are binding for all persons of member states. However the final text of the Regulation differs from both the Rome Convention and the Proposal for the Regulation “Rome I” since it allows the courts to apply the overriding mandatory provisions only of those states where the obligations arising out of the contract have to be or have been performed. This provision narrowed the range of overriding mandatory provisions as compared to the former version – “the overriding mandatory provisions of the state with which a contract is most closely connected”. It seems that such an approach contributes to the appearance of “limping legal relationships”. Belarusian law proceeds from the opportunity of applying the overriding mandatory law of any other state being most closely connected with the considering legal relations.

The aforementioned analysis allows concluding that both the recent European and Belarusian private international law base on the uniform principles. At the same time, the European system of conflict law rules is multiperspective and characterized by a greater complexity, responsiveness of both parties’ interests in the legal relations, an unprejudiced approach to the protection of consumer rights, on the one hand, and overriding the hindrances to a free movement of individuals, capital, goods and services, on the other.

References

1. *Batiffol H.* Les conflits de lois en matière de contrats. Paris, 1938. P. 282.
2. *Chetverikov A. O.* Preface to the Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I). Available at: www.eulaw.edu.ru/documents/legislation.htm.
3. Council Regulation (EC) N 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters Official Journal. L 012. 16.01.2001. P. 0001–0023.
4. *Hay P., Muller-Freienfels W.* Agency in the Conflict of Laws and the 1978 Hague Convention // *The American J. of Comparative Law.* 1979.
5. Judgment of the Court of 23 November 1999. Criminal proceedings against Jean-Claude Arblade and Arblade & Fils SARL (C-369/96) and Bernard Leloup, Serge Leloup and Sofrage SARL (C-376/96).
6. *Loussouarn Y., Bredin J.* Droit du commerce international. Paris : Sirey, 1969. P. 710–716.
7. *Lunz L. A.* Private International Law. In 3 vol. Moscow, 1970–1978.
8. *Patrikeev E. A.* Development of the Private International Law of the Member-States of EU: conflict of Laws. *Pravovedenie.* 2006. № 5. P. 121–132.
9. Regulation (EC) N 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I). OJ. L 177. 4.7.2008. P. 6–16.

10. Regulation (EU) N 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters. OJ. L 351/1. 20.12.2012.
11. Sixth Council Directive 82/891/EEC of 17 December 1982 based on Article 54 (3) (g) of the Treaty, concerning the division of public limited liability companies. OJ. L 378. 31.12.1982. P. 47–54.
12. Third Council Directive 78/855/EEC of 9 October 1978 based on Article 54 (3) (g) of the Treaty concerning mergers of public limited liability companies. OJ. L 295. 20.10.1978. P. 36–43.
13. Twelfth Council Company Law Directive 89/667/EEC of 21 December 1989 on single-member private limited-liability companies. OJ. L 395. 30.12.1989. P. 40–42.

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