

The Underwriting Process in the Environmental Pollution Liability Insurance for Enterprises with Hazardous Waste Production

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Summary:

The article deals with some of the problems associated with underwriting process in the insurance companies, offering legal liability insurance to business companies of high environmental risk production. It is focused on some topical issues, highly significant, but not sufficiently treated by the insurance theory and practice in Bulgaria.

The main goal of the article is briefly to shed a light on the underwriting concept in the insurance sector. Firstly, the specifics of the underwriting as a core business process that drives and interacts with other main and secondary processes in the insurance company are outlined. Thus it shapes almost the entire company's profile, competences and business model as well. The article also outlines the decisive role of the underwriting and the need of its implementation in environmental pollution liability insurance for companies with hazardous waste production.

Key words: insurance underwriting, environmental risk, technogenic risk, environmental pollution liability, insurance product, insurance business process.

JEL Classification: G22; Q59

1. Introduction

Implementing the underwriting in the insurance companies offering legal liability insurance against high environmental pollution risks requires specific approaches and procedures. Unfortunately, some issues related to the management of the underwriting as a business process in insurance, still remain aside the core interest of the insurance theory and practice in Bulgaria.

The need of changes in the normative (legislative) base, regulating the insurance of environment pollution risks requires improving the documentation related to the organization of the underwriting process in the insurance companies. That means considerable efforts should be focused on: developing of adequate underwriting methodology; developing adequate and effective insurance underwriter job description; developing and setting of underwriter manuals, reliable premium rates and tariffs guidelines; creating and providing sound informational and analytical base for managers (for strategic, operational, financial planning, forecasting etc); developing (by "Underwriting\$ department) instructions and recommendations for the underwriting procedures and activities connected with environmental risk evaluation, fixing the liability limits, the product offering and

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selling etc. All these and other unsolved problems inspired the author to present and discuss in the article the most exigent issues, namely:

- Clarifying the underwriting in the Insurance sector.
- Specifying the peculiarities of underwriting as a core business (management) process driving and interacting with other main and secondary processes in the insurance company.
- Outlining the role and need to implement underwriting in environmental pollution liability insurance for companies with hazardous waste production;
- Organization of the company underwriting process in environmental pollution liability insurance for companies with hazardous waste production

The thesis defended in the article is: the successful implementation of underwriting (as management process) in the environmental pollution liability insurance contributes to increase the insurers competitiveness and the demand of the environmental liability insurance. Regarding the underwriting process efficiency and effectiveness increase in that field, especially for technogenic risks coverages, companies must implement a consistent two-stage underwriting.

1. The term "underwriting" in insurance

The term "underwriting" literally means „signing under an agreement or condition".

More precisely, from practical point of view, underwriting in insurance is mainly comprehended as accepting liability on behalf of the insurer to compensate (pay) future claims (with taking into account the their stochastic nature occurrence) under the conditions stipulated and agreed in the insurance contract, observing the fairness of the insurance premiums (and adequacy of insurance reserves respectively) and sufficient the insurer to fulfil his obligations (Gorulev, D., 2013, p.59).

There are a good number of definitions for the insurance underwriting in the specialised literature. Many of the authors define underwriting as a **process**. One of them defines underwriting as „a process of selecting and classifying risks with regard to its criteria of insurability, determining the fair premium rates as well as the option of rejecting risks not relevant to that criteria and requirements of insurability" (Arhipov, A., 2007, p.13).

According to another similar definition, underwriting is defined as a „process of analysing, accepting or rejecting risks for insurance (reinsurance); this process also involves assessing and classifying and selecting the insurable and non-insurable risks, setting the insurance periods, terms and conditions as well as liability limits and calculating the premium rates" (Arhipov, A., 2007, p.13).

Underwriting is also defined as „a business process, comprising of a set of procedures and actions leading to reasonable decision making based on the insurability of the risk and the chance to be accepted or rejected with regard to balanced and profitable insurance portfolio building" (Gorulev, D., 2013, p.59-60).

According to the definition presented by the International Association of Insurance Supervisors (IAIS), underwriting is a „process the insurance company determines whether it accepts the applicant's (potential buyer) proposal (application) for insurance and if so, under what conditions".

In the insurance industry, underwriting is also defined as a type of highly intellectual profession (job) performed by a qualified specialist (underwriter, surveyor) or by a specialised organisation, which acts on behalf of the insurer and is duly authorised to perform operations connected with the assumption or refusal of insurance protection. Therefore "an underwriter is a professional who is familiar with the potential risks and risk exposure of the interest subject to insurance. This ability is gained not only

through theoretical study but is also as the result of many years of experience dealing with similar risks and managing claims on those risks" (Macedo, L., 2009).

Therefore, underwriting is defined as „insurer activity aimed at evaluating the risks to be insured, defining an adequate insurance rates, terms, conditions and building a profitable insurance portfolio" (Deminskii, S, 2006).

Underwriting can also be seen as **a systematic set of procedures and actions** of the insurance company, namely (Deminskii, S., 2006):

1. Setting the goals and objectives of underwriting.
2. Specifying the underwriting functions.
3. Determining underwriting levels
4. Establishing an organisational underwriting structure.
5. Recruiting, training and further qualification of underwriters
6. Designing and implementing underwriting regulations and guidelines.

Underwriting is also seen as a type of insurer's **policy** which is based on the *mission, goals* and *values* of the insurance company and which is aimed at creating underwriting guidelines by insurance type.

As a document, the underwriting policy in insurance is "a written form of agreement (contract) containing the main concepts, coverage, terms, conditions, exclusions, restrictions, etc" as designed and provided by the company. In other words, it reflects "*the concept* of accepting or rejecting coverage of certain types of risks depending on the company's objectives; it also defines the priority of the economic and structural organisational efficiency when operating with such risks and outlines the principles regulating partnership and risk transfer" (Gorulev, D., 2013, p. 62):. That means that the main goal of the underwriting policy in insurance is, to put the conceptual foundation of decision making when dealing with different risk groups depending on specific *criteria*, such as (Gorulev, D., 2013, p. 62):

- profitability when operating with risks (level of economic viability);
- relationships with partners in terms of risk redistribution;
- level of acquisition expenses;
- authenticity and reliability of the information regarding the risk factors;
- level of predictability of future losses based on past claims experience;
- strategic value when operating with risks (partners) and others.

According to the principles of the insurance theory and practice, the underwriting policy of the insurance company must be formulated and implemented taking account of the following *factors* (Arhipov, A., 2007, p.16):

- a. the financial capacity of the insurer, evaluated by: risk appetite indicators; company's risk retention; reinsurance protection; acceptable risk accumulation; acceptable level of claims; investment opportunities etc;
- b. interrelation between underwriting and the supportive policies like: ratemaking, financial, investments, personal management etc.
- c. size of the forecasted underwriting income, sustainability and manageability of the risk portfolio;
- d. reinsurance policies related to defining the types and forms of reinsurance, reinsurance terms, conditions and limitations, reinsurance ratemaking;
- e. underwriters authority and motivation;
- f. forecasting the claims size and deviations;
- g. conjuncture of the insurance market;
- h. acceptable level of company indebtedness;
- i. changes in legislation and considering their impact on the company underwriting policy, etc.

In summary, it logically follows, and we dare accept, that underwriting in the insurance sector is a specific business management process, directly related to the other company main, secondary and supportive business processes. The underwriting process cycle in insurance is of several stages (steps), rather specific for

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the insurance company. They are principally applicable to all the types of insurance, since they concern procedures, like:

- risk selection;
- risk classification;
- risk assessment and evaluation;
- risk diversification and spreading (distribution).

All the above stages in the company underwriting process influence on the other insurer policies and activities – marketing, investment and reinsurance policy as well. For example, *risk selection* predetermines to a extent the insurance types and subtypes and their combination depending on the selected risks assumed and covered by the insurer. This determines the insurance lines, subject to the product policy of the company. *Risk classification* relates to identifying the risks and risk exposure and setting the similar risk into risk groups (classes). by implementing the principles and instruments of the actuarial methods and instruments. *Risk assessment* is the determination of qualitative (recognition of the threats and perils in a given situation) and quantitative (measuring the magnitude and likelihood of the risks and risk exposure) estimates with regard to calculating of a fair insurance premium. That means it is directly related to the ratemaking and pricing policy of the company. Furthermore, with regard to split the risk and mitigate the risk exposure insurers undertake coinsurance and reinsurance.

2. Nature and particularities of underwriting as a business process within the insurance company

The nature of the underwriting policy of the insurer is predetermined by its functions. Principally, the Insurance theory specifies four *functions* of the phenomenon, namely (Arhipov, A., 2006):

1. Analytical – aimed at:

- identifying the objects of insurance (property or moral);
- analysing the factors, influencing on the risk exposure and risk occurrence;

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- identifying the insurance interest;
- specifying the risks to be covered;
- determining the sums insured or limits of liability;
- evaluating of the probable average and maximum loss;
- analysing and forecasting the level of profitability of the insurance portfolio for a certain period of time;
- setting recommendations for changes of the premium rates and size in case of if the insurance portfolio shows negative or unsatisfactory financial results;
- analysing the market segments by lines of insurance.

2. Practical – oriented to:

- deciding to grant or refuse insurance protection;
- setting the terms and conditions of the insurance contract;
- calculating the premium rates (and premiums) for the property and liabilities to be insured;
- negotiating and fixing the sum insured or limits of liability;
- designing and implementing consistent loss prevention plans;
- arranging reinsurance protection.

3. Methodological – it involves:

- design and developing underwriting guidelines by lines of insurance;
- improving the professionalism and qualification of the insurance underwriters and actuaries;
- training insurance intermediaries in insurance selling, based on applying the principles of generalisation and specialisation (Iliev, B., Misheva, Ir., 2005, p. 115-116);
- specialising of the selling personal by product groups, risk types and markets (Misheva, Ir., 2001, p.129-133).

4. Control – it involves:

- monitoring of the risks and risk exposure of property insured;

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- control on the loss prevention plan implementation and efficiency;
- control on the functionality of the underwriting process;
- monitoring of the insurance portfolio parameters and dynamics;
- managing and optimising the product and pricing policy of the insurer.

The functions of underwriting in insurance, in one way or another, are well defined in the insurance literature and practice. With regard to the branch specifics, they are valid for the underwriting in all the insurance sectors, both in P&C (Property & Casualty) and Liability insurance.

Implementing the underwriting policy in insurance company involves specific *insurance operations*, namely (Arhipov, A., P., 2008):

- a) risk analysis;
- b) accepting or rejecting risks and insurance protection;
- c) adapting the premium rates depending on the risk exposure of property and liability;
- d) fixing the insurance premium on the base of sum insured;
- e) developing the policy wording (terms and conditions) and risk coverage;
- f) concluding and signing the insurance contract (policy);
- g) recommending and implementing procedures for risks minimization;
- h) exercising adequate monitoring and control over the insured property risk exposure and the influencing factors;
- i) exercising control over the functionality of the preventive measures.

According to the insurer's risk appetite, the insurance theory defines a couple of *underwriting policies*. They can be classified into the following groups (Gorulev, D., 2013, p.63):

- aggressive – insurers accept almost all risks offered, but at a higher price (premiums) of the insurance product; in some cases the insurer covers even less investigated risks and properties;

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- moderate – the insurer is careful in risk selection and rejects unknown and less investigated risks;
- mono-subjective – risk coverage depends on the financial opportunities of the company; the attention is focussed on the sound management of insurer's risk;
- multi-subjective – the insurer prefers to spread the risk by reinsurance and outsourcing some of the activities.

The specific nature of the underwriting policy in insurance is also demonstrated by its *tasks* in the insurance company processes and its core activities, namely:

1. Identifying the set of factors, influencing on the increase of risk occurrence probability.
2. Selecting the most significant risk coefficients and risk indicators shaping the property and liability risk exposure and risk occurrence.
3. Specifying the general, special and supplementary terms and conditions for the different lines of insurance;
4. Developing methodological instructions and guidelines for aggregate or individual portfolios protection.
5. Setting recommendations to control on the implementation and efficiency loss prevention;
6. Developing adequate criteria for efficiency evaluation of the underwriting in the insurance company.

Within the organisational structure of the insurance company, the underwriting department is positioned in the senior management sector along the other departments of the same rank, e.g. marketing, actuary, investment, reinsurance, finance, etc. (Misheva, Ir., 2014, p. 67).

As a business process in the insurance, underwriting management should be considered as an element of the strategic management of the company, ensuring its strategic goals to be achieved. Underwriting management is closely related and interacts with the other company business processes such like: marketing management, staff

management, risk management and others. Underwriting in the insurance company is supported by the strategic controlling, since it is a core (main) business process, driving other processes, like: developing insurance products, insurance products selling, maintaining and servicing the insurance contracts, claims evaluation and adjustment. Underwriting management is also connected with the operational controlling which in turn ensures the medium and short-term goals of

the insurance company are met (Misheva, I., 2014, p.68).

Schematically, the position and role of underwriting as a management business process as well as its relations with the other business processes in the insurance company can be illustrated by the next figure. (figure 1).

The figure illustrates the underwriting position as well as its key role in relation to the performance of the other business processes in

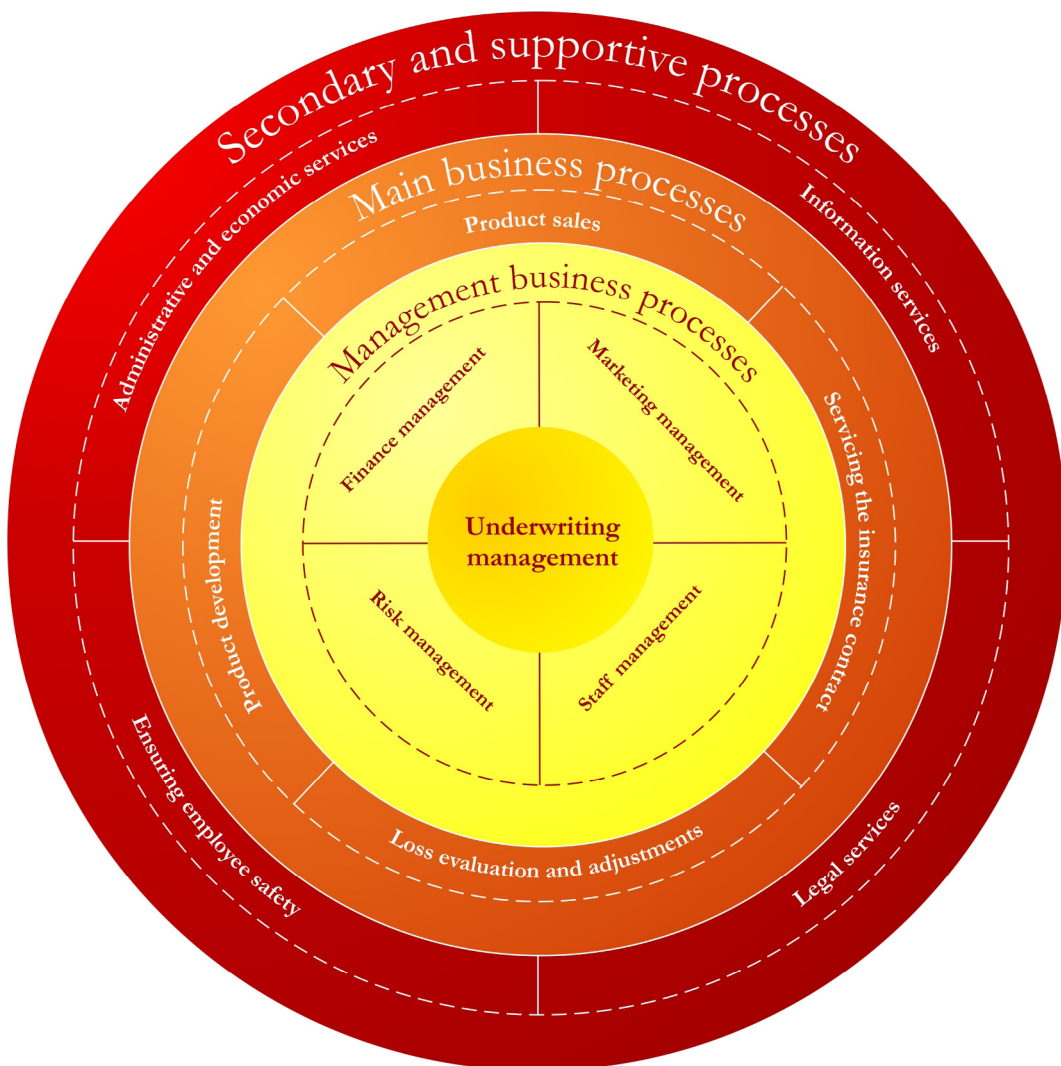


Fig. 1. Position and role of underwriting in relation with the other business processes in the insurance company.

the insurance company, e.g. management, and the other core (main), secondary and supportive processes. With regard to its functions, underwriting plays a key role in management decisions making at all levels in the company hierarchy, thus contributing to achieving insurer's marketing goals and competitiveness.

3. The need and Importance of Underwriting for the Environmental Pollution Liability Insurance for Companies with Hazardous Waste Production

The need and importance of implementation the underwriting in hazardous waste production liability insurance is determined by a number of prerequisites. They are almost the same for the successful implementing it in environmental liability insurance in Bulgaria too. Some of them are:

- financial and social efficiency of the insurance company performance;
- establishing a flexible pricing policy of the company;
- product diversification by enlarging the risk coverage with accepting new, less known risks, such as technogenic risks are;
- advertising the advantages of that type of insurance, thus increasing the public "culture".
- stimulating the public demands for insurance and this way helping the efforts for National environmental policy realization.

The need of adequate underwriting policy in companies, offering environmental liability insurance is predetermined by the specifics of the "environmental pollution" risks, particularly the risks resulting of industrial accidents. Another problems are the difficulties connected with the risk evaluation, since they drive almost the entire underwriting process in the company. Compared to all other types of liability insurance, the risk evaluation in environmental liability insurance is the most underwriting problem. It mostly stems from the difficulties related to the calculation

of the two important risk indicators – loss frequency and loss ratio. In cases such as air pollution, water pollution, soil contamination, radioactive contamination etc., insurance premium calculation is a rather hard work.

The lack of experience and practice of the companies in technogenic risks insurance as well as low liability limits are other factors for low interest and demanding this type of insurance in Bulgaria. But the impact of a number of risk factors on the total risk exposure of the business companies with hazardous waste production forces the raises the role of underwriting as a core process in the innovative insurance branches like environmental liability insurance is.

Depending on the interests of the stakeholders involved, **the importance** of the underwriting in liability insurance of business companies with a high environmental pollution risk should be regarded from various points of view.

The stakeholders concerned in the organizing and implementing of a sound and adequate underwriting policy are mainly: customers, insurance managers, actuaries, shareholders, underwriters, insurance brokers, reinsurers and supervising authorities as well.

Central role in the various insurance, economic, legal and reinsurance relationships among the parties in the insurance, mentioned above, is that one of the underwriter, as the he is a key person who, with regard to the principle of equivalence, drives, adjusts and balances the interests of all parties in the contract. It is the underwriter who on the basis of actuarial computations and assumptions calculates fair (increased or discounted) premiums, based on the actuarial valuation and assumptions, depending also on the line of insurance and risk exposure of the property or liability to be insured. Furthermore, the risk manager of the company estimates the company expenditures, commissions, taxes etc, be added to the risk premium in the risk strategy. They also estimate whether the 'value for money' index of the insurance meets the expectations of

the company managers. . Next, the insurance broker, applying increases or discounts, offers to the customer the final "price" (gross premium due) for the desired insurance coverage.

The interests of the shareholders of the insurance company should not be neglected either, as they also expect to make a profit and benefit from the insurance transactions. Therefore, the underwriter must design, compile and propose such terms, conditions and price of the insurance protection, that primarily to guarantee realizing the main goal of the company – building and maintaining a sound and profitable insurance portfolio.

The underwriter is also of key importance in arranging and implementing of the reinsurance policy of the insurance company. After the insurance contract is arranged and concluded, the company should find "the right" reinsurers, to cede (transfer) and protect itself by adequate reinsurance plan, a share of the primary (originally) covered environmental risk and liability by means of a legally and economically sound reinsurance contract. The underwriter participates to a great extent in the process of selecting the proper type of reinsurance and maintaining fair the reinsurance relations.

Another stakeholder, interested in implementing of adequate and sound underwriting policy in the insurance of companies with high environmental risk liabilities is the State. It is demonstrated by promoting and exercising of effective insurance supervision and regulation, realized by the Insurance Supervision Authority at the Financial Supervision Commission (FSC) The latter exercises strict control over the solvency and financial stability of the companies, this way guaranteeing the customers' and third parties' (companies and physical persons) interests are consistently protected, affected by potential environmental pollution.

In the frameworks of this study, the **role** of the underwriter in the environmental liability insurance of companies with hazardous waste production can be observed into the following *aspects*:

- analyzing, processing and assessing the information on insurance applications

and supporting documents to determine whether a risk is acceptable for insurance of the companies with hazardous waste production; information on insurance applications to

- evaluating the risk of potential environmental pollution;
- approving and signing the insurance contract (the policy);
- advising and supporting the company risk management to build and maintain a balanced portfolio of homogeneous risks,
- data mining and monitoring the dynamics (changes) of risk exposure of the company with increased risk, etc.
- participating in processing the claims, suffered by third parties due to the environmental pollution accidents;
- underwriters, employed by reinsurers also participate in the approval of the terms and conditions the insurance companies must observe with regard risks reinsured;
- suggesting recommendations related to insurance products diversification by including new risks in the risk coverages;
- providing the company management with information on the risk exposure, the underwriters help the internal audits and audit reports preparation for the Internal Control Authority of the insurer.

Consequently, implementing a flexible and adaptive underwriting should be observed as an indispensable prerequisite for adequate product and pricing policy, meeting the demands and interests of the insureds. That means the underwriting should be focussed on the insurance terms, conditions and ratemaking improvement, based on realistic assessment of the environmental risk and liabilities, subjects to insurance.

4. Organisation of the underwriting in environmental pollution liability insurance for companies with hazardous waste production

Implementing of underwriting in the insurance of "extremely sophisticated objects", respectively insurance of companies of high environmental pollution risk, requires

making and implementing more constructive decisions. Although the direct implementation of the traditional underwriting methods and techniques is inappropriate for environmental risk insurance, the basic insurance approaches, principles and logic should be respected by the insurance companies. As they are substantially intrinsic and valid for all insurance activities and procedures in all insurance branches, the **organization of the underwriting process is closely connected with:**

- performing underwriting functions;
- specifying the methodology of the underwriting process;
- performing the underwriting policy tasks;
- performing insurance operations envisaged in the company underwriting policy;
- control on the performance of the entire underwriting process;
- monitoring the company underwriting policy.

Environmental pollution liability insurance companies with hazardous waste production necessitates performing the underwriting on **three consecutive levels (steps), namely** (Gorulev, D., 2013, p.60):

- preliminary underwriting;
- insurance underwriting;
- reinsurance underwriting.

Preliminary underwriting refers to all procedures and activities related mainly to the need and expediency of buying insurance. That time the underwriter collects, organizes and analyses the information (from application and supporting documents) pertaining to the property risk exposure and risks to be covered (risk coverage).. More precisely, that means analysing and assessing the risks according to their insurability, measurability as well as the possibility to be managed, i.e. are they or not susceptible to procedures aimed at lowering the probability of risk occurrence, risk reduction, mitigation, etc. Consequently, on the base of the results obtained the underwriter designs and formulates the terms and conditions of the insurance contract (policy)

Insurance underwriting is aimed at the specifying, precisising and formal approval of the terms, conditions, pricing, special warranties and exclusions, relevant to the demanded or corrected scope of risk coverage. This stage involves identifying and gathering information about the risks to be included in the scope of the insurance coverage, the so-called "inserted" (listed) risks. These risks are selected by the client and are exhibited in the insurance contract (policy). The main goal at this stage of the underwriting process is finally analyse risk exposure and fix the risk coverage of the contract.

Reinsurance underwriting is connected with decision making with regard to opportunities for reinsurance of the risks assumed by the direct insurer. This stage involves the assessment of the economic efficiency of the reinsurance transaction for both parties, contracting reinsurance.

Implementation of the so called "preliminary underwriting" in environmental pollution liability insurance is accompanied with the need to overcome some difficulties, mainly related to factors complicating the underwriting process itself. Such factors could be: the lack of reliable methodologies and methods for technogenic environmental risk assessment as well as lack of sufficient and systematic information about that types of risks at national and regional level; a large number of the risks cannot be assessed or could only be assessed poorly; there insufficient marketing researches on the behaviour of the contracting parties, beneficiaries, competitors and other stakeholders in this type of insurance; poor promotional initiatives in the field of the organisational, economic, financial and institutional rationality of the environmental risks and liability insurance.

Insuring companies with hazardous waste production against environmental pollution liabilities, the insurance underwriting process is mainly connected with identifying the insurance interest of

the legal entities as well as promoting and encouraging the benefits insurance as efficient and effective tool in the corporate risk management strategies. Thus, important task of the underwriter is to support the risk manager of the company in selecting the right and economically appropriate (to risk exposure) insurance product among the various ones, available in the insurance market.

The reinsurance underwriting is implemented, since insuring technogenic environmental risks is connected with a high level of uncertainty of risk and the difficulties to foresee the future potential losses. The fact that a great number of environmental risks are considered as uninsurable, they are often excluded from the scope of liability and rejected by most of the insurers. Otherwise, if some of the environmental risks and liabilities are included in the insurance coverage, force the insurers to implement a consistent reinsurance policy and programs as to guarantee the company financial stability and solvency.

Insurance of the liability of the companies with a high environmental risk exposure, it is reasonable to apply the so-called "two-stage underwriting". That means consecutively applying **two types of underwriting** (Nikolenko, N., P., 2006, p. 16):

- Firstly, applying standard underwriting approaches, methods and procedures;
- Secondly, applying individualized (customized) underwriting.

Figure 2 illustrates our model of the interaction and relationships among the participating parties and the other supportive components over the underwriting process in the frameworks of environmental pollution liability insurance.

Standard underwriting is a set of activities and procedures related to the selection and acceptance (covering) of the insurance liability risks, specified in the general terms and conditions of the insurance wording form. Standard underwriting is implemented according to

the guidelines and instructions specified for each type of insurance line and coverage, but conformed to the principles, mechanisms and tools of the insurance as well as the manner the insurance contract is to be concluded etc. Principally, this type of underwriting is mainly oriented to cases of traditional risk coverages. It is

usually performed by the company selling department or by intermediaries, namely insurance agents and brokers or by insurance professionals at the company branch offices.

Individualized (customized) underwriting is observed as a set of activities and procedures, connected with insurance covering property and liability of specific (individual) nature, peculiarities and risks parameters. It is associated with a scrutinized individual assessment of the before mentioned risk characteristics of the objects and risks to be covered. In such cases specific (individualized) coverages are designed and applied. Principally, such type of underwriting is performed by a professional underwriter.

The standard underwriting procedures in environmental liability insurance of enterprises operating under hazardous sites conditions and using hazardous materials require gathering detailed information prior to the insurance contract signing. Therefore, the insurance application form and questionnaire must contain reliable information about: the type of company business and activities performed, the type of hazardous materials; description of the localization and layout of the hazardous production sites, a copy of license for plant and equipment commissioning, occupational safety regulations, documents and evidence for the plant, equipment and technologies commissioning compliance with the official safety requirements and regulation etc. At this stage the customer mainly communicates with the insurance broker. The latter helps designing an adequate and efficient insurance coverage as well as fixing

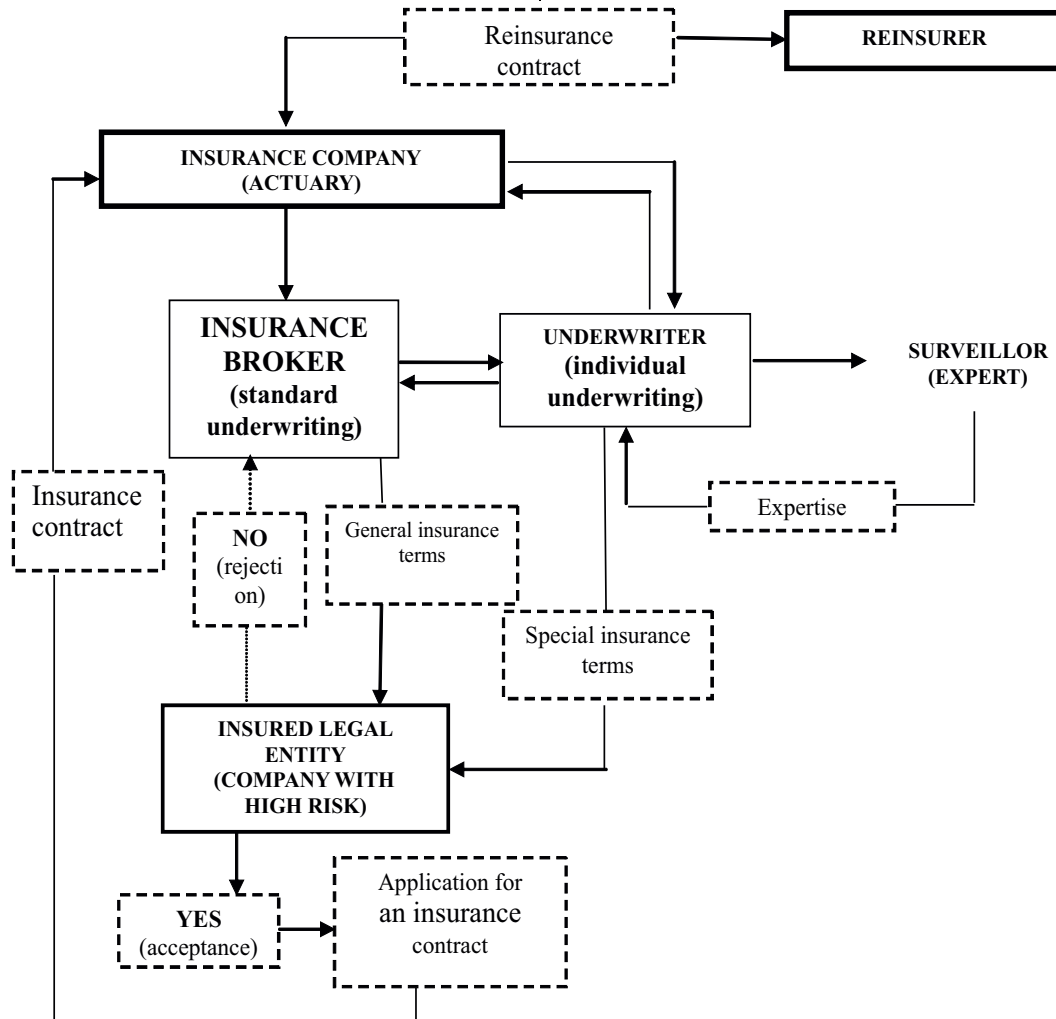


Fig. 2. "Two-stage underwriting" in the frameworks of the environmental pollution liability insurance.

of the sum insured and suggesting variants of insurance products for consideration and final selection.

The next step is the individualized (customized) underwriting. It deals with further detailed and précised risk evaluation and adapting of the insurance terms and conditions to the actual (for the case) property risk exposure, limits of liability, exclusion etc, as much as possible adjusted to the demands of the customer, subject of insurance. All these issues are summarized

and presented for approval by the underwriter. Usually, in environmental liability insurance, for more précised arrangement of the risk coverage, another expert, a surveyor, is also involved. On the basis of his opinion and formal expertise, the decision about the most adequate, tailored to the case, insurance combination and policy pro forma are drafted. The latter is presented to the company risk manager for revision and after the adjustments (if necessary) have been made, the formal insurance contract (the

policy) is prepared and forwarded to a broker for finding and placement the product in a suitable insurer (reinsurer, if reinsurance is needed) and the final contract signing.

Recently, due to the rapid Global changes, increased dynamics and values as well as the rise of uncertainty in the business companies' environment, a flexible and sustainable insurance marketing, environmental risk management and corporate risk policy must be performed, conformed with the huge technological changes, with respect to solving the global problems of the environmental protection and social interest. Among all the problems, mentioned before, the most important one the business companies are faced is how adequately and most efficiently to respond to the continuously increasing changes in the business environment they operate in (Simeonov, Ogn., 2004). These changes and arising problems impose the establishment of efficient and sustainable risk strategies of the business companies. As far as the companies with hazardous waste production, it is obviously and absolutely indispensable is the insurance risk management to become a decisive integral part of corporate management.

5. Conclusions

The improvement of the relationships among all the participants in the insurance underwriting process should be observed as a crucial prerequisite for a rational, successful and efficient implementing of environmental liability insurance of the companies with high environmental pollution risk in the practice. As mentioned earlier, the insurance underwriting as a management business process in the insurance companies is key factor for coordinating the decision making of all the professionals at all levels in the structure hierarchy in the insurance company.

Over the last decade, the so-called "revolutionary analyses" have played a crucial role and have extremely influenced on the shaping the insurance sector behaviour as well as on the benefits of the insurance protection in the sector under review. The tendencies are that „multiple statistical models, based on codified, heuristic underwriting principles and rules, to be used by skilled risk experts in their efforts to achieve new levels of sophisticated analyses and clear rules for decision making". Such a combination will generate more value and will allow using of focused data, thus achieving higher efficiency rates. Last but not least, improving risk selection will bring to better risk evaluation based on knowledge management tools and regulations.¹

We do hope that the insurers, offering environmental risks insurance would make more effort to organize in their company structures an "Underwriting department", specialized in dealing with environmental risks and problems. Establishing an adequate underwriting policy will bring about to implementing of a flexible insurance product, pricing, communication and selling policy of the insurer, relevant to efficient and beneficial supply and demand of environmental risk and liability insurance in Bulgaria.

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