



Global insurance broking: Oil and gas industry

Deloitte CIS Research Centre
Moscow, 2016

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Introduction

The high quality of insurance services, both in Russia and globally, is evidenced, among other things, by consistent relationships between parties: insured, insurers, insurance intermediaries (agents and brokers), insurance underwriters and public insurance regulators.

The interests of different insurance parties are intrinsically interrelated. That is why, finding the optimal balance of interests is critical to the functioning and sustainable development of the entire system. Any significant shift towards one or another group disrupts the system's internal balance, hinders the smooth running and evolution of insurance relationships and may even escalate crises and destroy the insurance market as a whole. Any failure of insurance-related companies and regulators to correctly interpret the peculiar and systemic nature of the Russian insurance business will inevitably entail disastrous consequences [6].

The concept of an insurance broker is relatively new for Russia. Nevertheless, our research is centred around this category, which has formed a separate market on its own. Consumers of insurance broking services are mainly represented by different businesses, namely large manufacturers, which are more inclined to engage insurance brokers on a mandatory basis for internal risk management purposes. However, with due regard to risk management policies generally used by large manufacturing companies, and more specifically those relating to insurance, one should bear in mind that Russia poses unique environmental and climatic challenges. These challenges greatly influence the ways business is done in Russia, including the insurance business. Therefore, global insurance expertise, studies, current best practices and regulations are of limited relevance for the Russian market. Yet, Russia cannot avoid global trends, including those related to insurance. That is why the country has an urgent need to address fundamental issues, primarily those concerned with the modernisation and improvement of the insurance market's internal infrastructure.

A cluster of intermediaries is a basic development tool for any market. For example, insurance broking (especially in the large manufacturer segment) creates key infrastructural opportunities for the insurance market at large to enhance the quality of relations among participants and achieve efficient development, both for the insurance market and for industries it serves. Given the current economic and political uncertainty, claims adjustment and risk management services are noticeably gaining ground. Accordingly, there is no need to rigorously prove the practical value of the insurance and reinsurance brokers, for they are directly involved in minimising transaction costs and neutralising current market uncertainties.

We invite you to have a look at our overview of the insurance broking market in which we analyse the following:

- Insurance broking in Russia and globally;
- Organisational and legal aspects of insurance broking in Russia and globally;
- Risk management in the oil and gas industry;
- Benefits of using an insurance broker in the oil and gas industry;
- Choosing an oil and gas insurance broker in Russia and globally;
- Choosing an insurance broker while having a high concentration of risk (based on the example of extreme climatic conditions).

Key findings

- Although insurance brokers act as intermediaries on the insurance market, they create key infrastructural opportunities for the whole market, which help enhance the quality of relations among participants and achieve efficient development both for the insurance market and for the industries it serves.
- Russia's top four insurance brokers in 2015 (by total revenue):
 01. Willis;
 02. Marsh;
 03. ICM;
 04. Aon;
- Top four insurance brokers globally in 2015 (by total revenue)
 01. Marsh and McLennan;
 02. Aon;
 03. Willis;
 04. Arthur J. Gallagher.

Russian insurance broking in figures:

The Russian market has shown a decline in the number of brokers:

- The number of brokers has fallen from 169 to 134 over the last three years (January 2013 - January 2016);
 - The trend is ongoing: 128 insurance brokers operated in Russia as of June 2016.
- Broker-mediated insurance premiums account for less than 6 percent of the country's total insurance premiums.
 - Insurance brokers are primarily engaged by major insurance companies: up to 12 percent of premiums attributed to first and second-class insurance companies are earned through insurance brokers.
 - The total number of insurance brokers is approximately 2.5 times lower than the number of insurance companies.
 - 70 percent of insurance brokers are registered in Moscow.
 - Brokers are mainly oriented towards large corporate insurance clients.
 - Subsidiaries of foreign insurance brokers account for about half of the total market revenue..



- The top 20 participants earn 89 percent of the total market revenue, where:
 - The top 10 get as much as 80 percent of the revenue.
 - The remaining 10 get only 9 percent of the revenue.

Notably, the absolute majority of the leading brokers (18 out of 20) are registered in Moscow.

- The average cost of complex insurance broker services for the oil and gas and large manufacturing clients in Russia is RUB 62.3 million.

Global insurance broking in figures:

- Broker-mediated insurance premiums account for more than 60 percent of the total market premiums.
- In western countries, insurance brokers facilitate from 10-20 percent (continental market model) to over 50 percent (Anglo-American market model) of total insurance premiums.
- The number of insurance brokers is 5-6 times higher than the number of insurance companies, with brokers distributed evenly across major cities.
- Broking fees for large companies range from USD 450 thousand to USD 1 million.
- The average broking fee for oil and gas and large manufacturing clients is approximately EUR 500 thousand.
- Insurance broking markets in countries such as Japan, South Korea, China and India are still underdeveloped.

Insurance broking in the oil and gas industry:

- No insurance company in the world is able to cover a large petrochemical facility on its own.
- There are many intermediaries, both in Russia and internationally, offering risk management services for oil and gas clients.
- Oil and gas companies have the most complicated risk maps, with no standardised risk management procedures.
- Oil and gas companies are categorised separately from other companies, as they are obligated to spend the largest portion of their funds on reinsurance. That is why coinsurance and reinsurance programmes form an integral part of the oil and gas insurance plans.
- In view of the obligatory nature of reinsurance in the oil and gas sector, an insurance broker has a secured position in the contract chain. To simplify the notion of insurance broking, insurance market analysts draw parallels between the cost of reinsurance services and the “cost” of insurance. Accordingly, one of the major strengths of insurance brokers is the ability to optimise the cost of insurance services for both the insured and the insurer.
- Over two thirds of the premiums are reinsured abroad. The key reason for this is that Russian reinsurers do not have enough capital.
- The Russian franchise insurance practice is somewhat insignificant as compared to the global market, where franchises are far bigger. Still, there is a recent upward trend in the volumes of franchise insurance plans.

Choosing an oil and gas insurance broker:

- Every company has its own preferences when choosing an insurance broker. Still, most companies, both in Russia and internationally, want to be sure that:
 - The broker has an understanding of their business;
 - The broker can promote their interests in dealings with insurers;
 - The broker holds an insurance policy;
 - The broker will provide support with insurance claims in exchange for an agreed compensation.
- Based on the analysis of global insurance broker selection practices employed by oil and gas companies, we found that multinational companies are more interested in the assets of insurance brokers, such as:
 - The broker's reputation in the market;
 - The quality of the client base;
 - Client loyalty levels;
 - Growth of the client base;
 - Memberships in professional associations and overall recognition in the market.
- The world's largest businesses show a keen interest in the weighted average figures reflecting the financial performance of insurance brokers.
- International practices show that the evaluation of intangible strengths is best accomplished using the screening approach, which facilitates greater quality and depth of the analysis.
- Based on our research, we have developed an integral system of criteria for the evaluation of insurance brokers, which comprises 27 individual attributes arranged in 5 blocks:

- Block 1. Qualifications and resources:
- Experience of obtaining coverage for fuel and energy clients;
 - Number of years in the business;
 - Claims adjustment experience with oil and gas clients;
 - Availability of dedicated oil and gas insurance specialists (professional standard: insurance broker, area of expertise: engineer);
 - Availability of an insurance policy obtained from an insurance company with high financial strength ratings;
 - The broker's strengths;
 - The client's competitors served by the broker;
 - Proven resilience and ability to meet the strategic needs and requirements of an oil and gas client, including the ability to serve the client globally;
 - Understanding of the oil and gas business and risks;
 - Suggested insurance plan structure;
 - Additional services relevant to oil and gas clients, e.g. risk management and claims adjustment services;
 - Roles and responsibilities of the key members of the proposed broker engagement team;
 - Coordination of the global team's work structure of the global coverage purchased.



Block 2. Trustworthiness and reputation:

- Due diligence risk level (according to SPARK-Interfax)
- Licenses;
- Positive track record;
- Commercial court practice;

Block 3. Geographical coverage:

- Presence in all of the client's markets.

Block 4. Financial position:

- Profit;
- Taxes due (maximum 1 percent of the total assets);
- Credit history (creditworthiness index);
- Financial stability ratio;
- Leverage ratio;
- Current liquidity ratio.

Block 5. Cost of services:

- The proposed compensation structure, including calculation methods and the level of compensation;
- The compensation structure for additional services, such as claims handling and internal distribution;
- Contract price.

Running an oil and gas business in highly risky environments (problem-ridden areas)

- Further expansion of the oil and gas sector is increasingly associated with having to establish manufacturing facilities in harsh conditions, such as the Arctic region.
- High synergy and concentration of various risks are typical for refineries in problem-ridden territories; however, the burden is growing more from environmental and political risks though.

- The total direct damage from accidents on Russian oil refineries for the period from 2011 to 2016 exceeds USD 1.5 billion (data includes only major accidents where loss exceeds USD 5 million).
- The most dangerous group – in terms of environmental risk– includes pipelines, chemical, mining, primary metal and steel facilities.
- The total known loss associated with environmental risks for the period from 2009 to 2014 amounts to EUR 461.6 million globally.
- However, despite the high relevance of environmental risks and the severe extent of the implications, the obligatory environmental insurance programme in Russia is still under debate between insurance companies and the Russian Ministry of Natural Resources and Environment.
- The following will be typical when selecting an insurance broker for a refinery in a problem-ridden territory:
 - Contract price less important
 - (by 13 pp);
 - Geographical coverage more important (by 11 pp);
 - Financial position and integrity more important (by 2 pp):
 - – It becomes more important that the broker understands the specific nature of oil and gas companies with production facilities located in problem-ridden geographical areas, and that the insurance programme's structure differs from the general provisions taking into account the special geography and synergy of risks (increase by 2 out of 10 possible scores).
 - Increased importance of reinsurance;
 - Increased importance of assessments resulting from independent screening surveys.

Overview of the insurance broking market

Insurance broking in Russia

Insurance intermediaries (agents or brokers) are not parties to an insurance contract. They focus on promoting the services of insurance carriers to clients and providing assistance to clients in signing and fulfilling reinsurance contracts. Note, however, that intermediary services related to the signing of insurance contracts on behalf of foreign insurance companies (except for motor insurance coverage for vehicles traveling abroad) are not allowed in Russia.

Our research is centred around insurance brokers and broker selection process. Leading market analysts believe that insurance brokers represent a key instrument for keeping the balance and ensuring the harmonic development of the Russian insurance system. This is because insurance brokers protect the insured's interests and facilitate out-of-court settlements of disputes (See Picture 1). Even though insurance brokers serve as intermediaries for the insurance business, they are important enough to form a separate market.

The key roles of an insurance broker are:

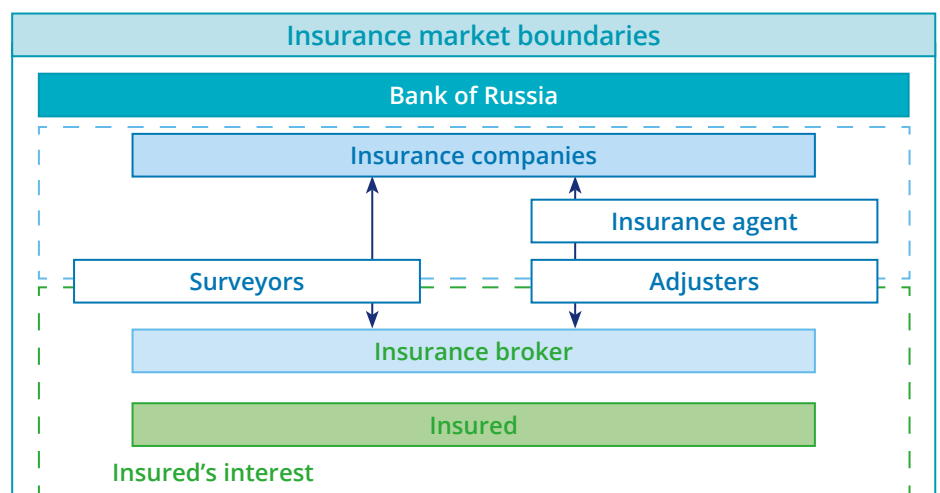
- Assessment of the insured's risks, performance of comprehensive underwriting procedures;
- Development of a customised service offering for the insured;
- Monitoring of insurance contracts and risks;
- Protection of the insured's interests and adjustment of claims.

Similar to insurance carriers, insurance brokers must have licenses for their operations. The Central Bank of the Russian Federation (Bank of Russia) acts as a regulatory, monitoring and supervisory authority for the insurance industry. Information about all insurance entities must be entered into a unified state register in accordance with the procedure set out by the industry regulator.

Licensed insurance brokers are generally categorised into three groups:

01. Multinational insurance brokers, i.e. those focusing on multinational corporations and large Russian companies;
02. Local insurance brokers, i.e. those operating in the open insurance and reinsurance market and primarily dealing with major corporate clients;
03. Captive insurance brokers, i.e. those serving industrial groups and public corporations for which they are created.

Picture 1. Insurance market stakeholders



Russia's leading insurance brokers

Leading insurance brokers in Russia and abroad serve various industry leaders engaged in manufacturing, mining, natural resources, agriculture, construction and other sectors. Major industry leaders generally tend to cooperate with multinational insurance brokers, which can contract with dozens of insurance companies at one time.

Overall, the large businesses insurance market is highly concentrated:

- Strongest participants demonstrate the best results (e.g. total and marginal revenues, number of clients etc.).
- 2015 saw a change of the market leader, with Willis Group (total revenue RUB 1.48 billion) moving up to the top of the list (See Table 1).
- The top 10 insurance brokers cover 80 percent of the market (see Table 2, [5]).

The top five insurance brokers that have been holding their positions for many years are (in alphabetical order):

- Aon;
- ICM;
- Malakut;
- Marsh;
- Willis.

There have been major changes in the top ten brokers:

- Sberbank's insurance broker rose to the sixth position in 2014.
- In May 2016, the Bank of Russia, by Order No. OD-1648 of 26 May 2016, revoked the insurance broker license of ICM Insurance Intermediaries LLC (the third largest insurance broker in Russia at that time) in light of the company's voluntary termination of respective operations.*

The client pool of the leading insurance brokers is primarily comprises the companies representing the most labour-intensive industries facing high operational and technological risks and the associated environmental, social and political factors. Let us now analyse the industry profiles of the world's leading insurance brokers:

- Marsh implements and develops the concept and practice of client representation through insurance brokerage and risk management. Marsh's key insurance broking clients operate in the following sectors:
 - Aviation;
 - Automotive;
 - Mining and metals;
 - Infrastructure;
 - Aerospace;
 - Timber;
 - Oil and gas;

- Retail and wholesale;
- Agriculture;
- Sports and mass entertainment;
- Construction;
- Marine transportation;
- Life sciences/biotech;
- Financial institutions;
- Chemical;
- Power.
- Willis is a leading global insurance broker offering a full range of insurance brokerage, risk advisory and reinsurance services. Willis focuses on serving clients in:
 - Energy;
 - Upstream oil and gas;
 - Aviation;
 - Aerospace;
 - Automotive;
 - Timber;
 - Construction;
 - Marine transportation.
- Aon plc offers global and local insurance plans, reinsurance, and employee insurance solutions and serves clients engaged in industries such as:
 - Energy;
 - Marine;
 - Aviation;
 - Aerospace;
 - Commercial properties;
 - Sports;
 - Leisure and entertainment.

Table 1. Top 4 insurance brokers in 2015 based on total revenues

Rating	Broker	2015 revenues, RUB thousand	Share in the aggregate top 4 revenues, %	Accumulated share in the top 4 revenues, %
1	WILLIS CIS INSURANCE BROKER LLC	1,482,413	37%	37%
2	MARSH INSURANCE BROKERS CJSC	1,103,755	27%	64%
3	ICM INSURANCE BROKER LLC	806,459	20%	84%
4	AON RUS-INSURANCE BROKERS LLC	627,019	16%	100%

Table 2. Russia's largest insurance brokers in 2014

Rating	Broker	Revenues, RUB thousand	Market share, %	Accumulated share, %
1	MARSH INSURANCE BROKERS CJSC	1,211,486	18.1%	18.1%
2	WILLIS CIS INSURANCE BROKER LLC	1,193,461	17.9%	36.0%
3*	ICM INSURANCE BROKER LLC*	733,141	11.0%	47.0%
4	AON RUS - INSURANCE BROKERS LLC	697,597	10.4%	57.4%
5	MALAKUT INSURANCE BROKER CJSC	383,533	5.7%	63.1%
6	AST INSURANCE BROKERS LLC	360,177	5.4%	68.5%
7	ATOMIC INSURANCE BROKER OJSC	258,770	3.9%	72.4%
8	RT-INSURANCE, INSURANCE BROKER LLC	177,392	2.7%	75.1%
9	ENERGOPROM INSURANCE BROKER LLC	169,702	2.5%	77.6%
10	EKONOMIKA STRAKHOVANIYA INSURANCE BROKER LLC	155,276	2.3%	79.9%
TOTAL TOP 10 REVENUES		5,340,535	79.9%	79.9%
11	RUSSIAN-ENGLISH INSURANCE BROKER	105,305	1.6%	81.5%
12	ASSISTENT PROFI INSURANCE BROKER LLC	92,841	1.4%	82.9%
13	BELAYA BASHNYA INSURANCE BROKER OJSC	74,399	1.1%	84.0%
14	MALAKUT CONSTELLATION INSURANCE BROKER LLC	56,100	0.8%	84.8%
15	TURNER INSURANCE BROKER LLC	54,878	0.8%	85.7%
16	MIRT INSURANCE BROKER LLC	54,333	0.8%	86.5%
17	INTERIS INSURANCE BROKER LLC	49,180	0.7%	87.2%
18	GLINSO-INSURANCE BROKERS LLC	47,614	0.7%	87.9%
19	INDUSTRIAL INSURANCE BROKER LLC	47,361	0.7%	88.6%
20	NBC INSURANCE BROKER LLC	44,571	0.7%	89.3%
TOTAL TOP 20 REVENUES		5,967,117	89.3%	89.3%
TOTAL OTHER (127 BROKERS) REVENUES		715,068	10.7%	
TOTAL MARKET REVENUES		6,682,185		

Source: Insurance brokers: Overview and Outlook, Bank of Russia, 2015



- Malakut provides insurance broker, reinsurance and engineering risk assessment services to companies in such industries as:
 - Space-rocket sector;
 - Defence;
 - Innovation;
 - Aviation;
 - Oil and gas;
 - Maritime;
 - Construction;
 - Financial institutions;
 - Any corporate clients;
 - Energy;
 - Trade credits and political risks;
 - Corporate medical programmes.

Legal forms of insurance brokers in Russia

Being a commercial organisation, an insurance broker receives consideration for its services, which depends on the list of services defined in the contract and addenda thereto and is calculated in one of the following ways:

- A fixed fee (about 50 percent of cases);
- A percentage of the insurance rate (premium) under the insurance contracts (nearly 50 percent).

- An hourly rate (nearly 1 percent);

Also, the value of insurance broker services in Russia may be summarised on the basis of statistical data available for 2014 [10]:

- The total revenue of insurance brokers amounted to RUB 6.69 billion;

- The number of signed broker service contracts was 2,880;
- The average bill for broker services in Russia amounted to RUB 2.32 million;
- The average bill for broker services in Russia for top-20 companies amounted to RUB 3.64 million;
- The average bill for the broker services rendered to oil and gas and large manufacturing companies in Russia amounted to RUB 62.3 million (for more details, see the “Competitive Environment and Criteria for Choosing an Insurance Broker in Russia” section);
- Broker service fees for Russia’s largest companies are significantly higher than for the average company and range from RUB 20 million to RUB 120 million per year.

Despite high fees, customers using broker services save money as well as the time that they would otherwise spend learning about insurance products and insurer offers, negotiating, preparing and executing insurance claim documentation, etc.[8, 9] Please, see the diagram illustrating the process of entering into a risk insurance contract (Figure 2).

As noted above, insurance broker operations are currently under scrutiny and must be in compliance with the strict requirements of the Bank of Russia, primarily as regards reporting requirements. Let's consider in more detail the key aspects of the legal status and licensing of insurance broker operations in Russia.

An insurance broker shall be established in accordance with the Civil Code of the Russian Federation No. 51-FZ of 30 November 1994, Federal law No. 14-FZ of 8 February 1998 "On Limited Liability Companies" or Federal Law No. 208-FZ of 26 December 1995 "On Joint Stock Companies", Law of the RF No. 4015-1 "On Organisation of Insurance Business in the Russian Federation", Federal Law No.129-FZ of 8 August 2001 "On State Registration of Legal Entities and Individual Entrepreneurs" and other legislation of the Russian Federation.

An insurance broker is a subject of the insurance business and its activity is subject to licensing. The Bank of Russia

is responsible for the regulation, control and supervision of insurance businesses. Information about insurance business subjects is captured in the unified state register of insurance business subjects following the procedure defined by the insurance supervision body.

Insurance brokers that accept money from the insured (reinsured) in payment under insurance (reinsurance) contracts must hold a security for the performance of their obligations in the form of a bank guarantee for at least RUB 3 million, or equity of at least RUB 3 million deposited in the form of cash (paragraph 6 of clause 6, Law of the Russian Federation on insurance business) [11].

Despite an additional formal burden and increase of the level of control and supervision since 2016, most experts in the insurance broking market believe this market trend to be positive. "This is a step forward that will make the broking market more transparent," said general director of Strakhovoy Broker Sberbanka LLC [3]. Creation of self-regulatory organisations (SROs) of insurance brokers is a new area in the legal regulation and support to the development of the insurance broking market in Russia. Thus, in accordance with Clause 4, Article 8 of Federal Law No. 23-FZ of 13 July 2015 "On Self-regulated Organisations in the Financial Market...", insurance brokers are obligated to join an SRO within 180

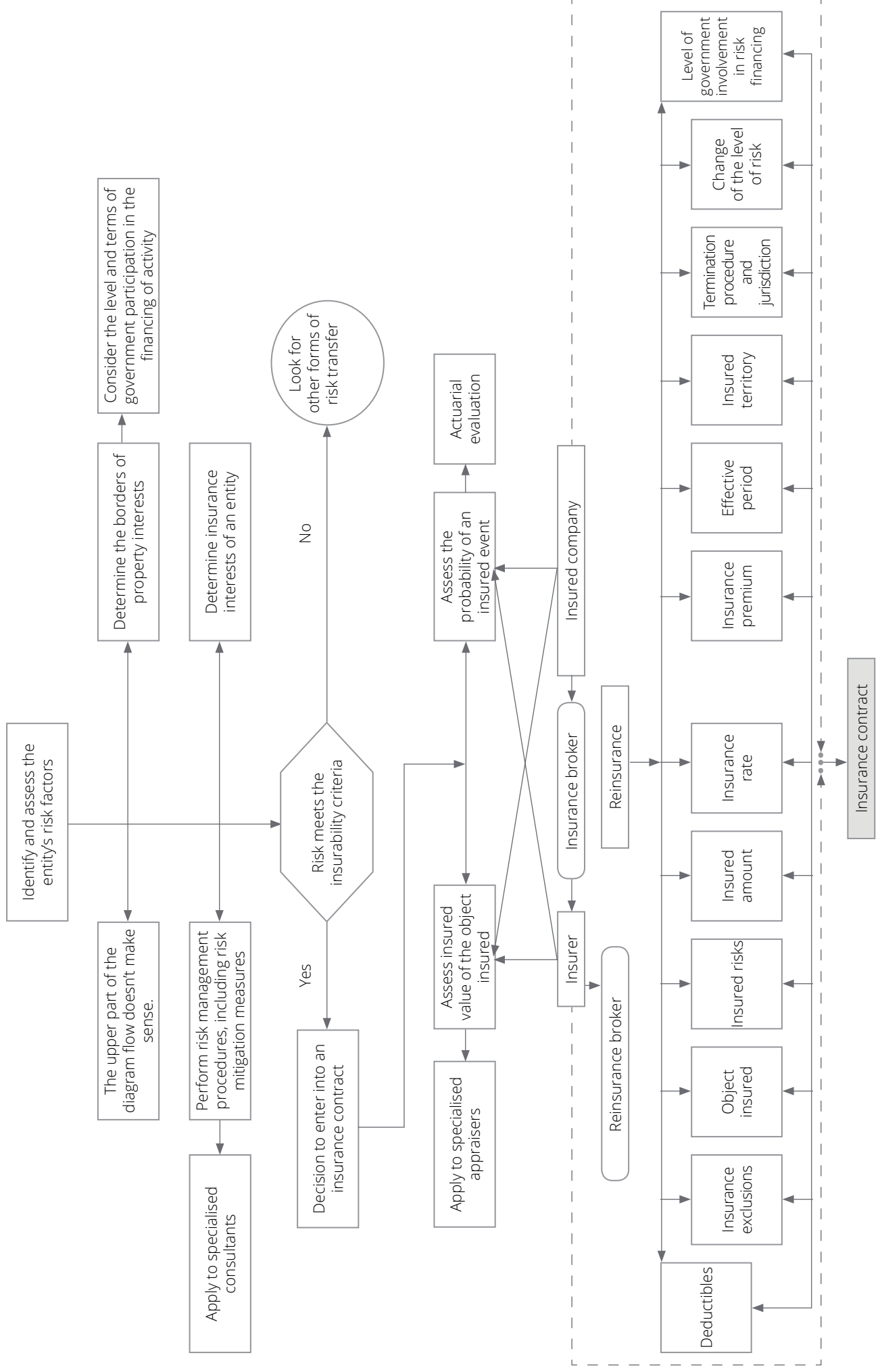
days from the date when the respective non-commercial organisation receives the status of an insurance broker SRO. In accordance with Clause 4, Article 3 of Federal Law No.223-FZ of 13 July 2015, an SRO should unite at least 26 percent of registered market participants (more than 35 brokers as at 8 December 2015).

It is likely that an SRO of insurance brokers in Russia will be created on the basis of non-commercial professional associations: the Association of Professional Insurance Brokers ("APIB") with 38 members, and the National Union of Insurance Brokers ("NUIB"), with 30 members. The insurance broking SRO will be responsible for the following [13,14]:

- Defining self-regulation principles: formation of professional activity standards, education, attestation, certification, and audit;
- Use of market instruments: aggregation of best practices, promotion of business interests of the professional community;
- Protection of activity: interaction with the Bank of Russia and government agencies in charge of law-making, taxation, judicial practices and other areas;
- Creation of the business image: increasing the level of client trust and financial literacy of the insured.



Figure 2. Diagram of the process of entering into a risk insurance contract



Trends

- Generally, the Russian insurance broking market has shrunk in terms of the number of participants: over the past three years (from January 2013 to January 2016) the number of brokers has decreased from 169 to 134. This trend is continuing. By June 2016, Russia had 128 insurance brokers [1].
- Transactions where brokers are involved account for less than 6 percent of market insurance premiums.
- Large insurance companies have been the ones that use the broker channel more actively (insurance brokers account for up to 12 percent of insurance premiums for companies in the first and second size groups).
- The number of brokers is approximately 2.5 times lower than the number of insurers.
- 70 percent of insurance brokers are registered in Moscow.
- Brokers focus on serving large corporate insurance contracts.
- Subsidiaries of foreign brokers account for about 50 percent of the broking market revenue.
- In monetary terms, the market is mainly divided among the top 10 insurance brokers: they received 80 percent of revenue and all of them are registered in Moscow. The next 10 brokers accounted for only 9 percent. Therefore, the top 20 insurance brokers account for 89 percent of the total market revenue. It is noteworthy that the absolute majority of them (18 out of 20) are registered in Moscow [5].
- The average bill for broker services rendered to oil and gas companies in Russia amounted to RUB 62.3 million.
- Creation of SROs of insurance brokers with obligatory membership is a new trend at the legislative level.
- It is likely that the insurance broker SRO in Russia will be formed on the basis of the following non-commercial professional associations:
 - Association of Professional Insurance Brokers (“APIB”);
 - National Union of Insurance Brokers (“NUIB”).

Expert commentary

“It appears that the current situation may change if we use the positive experience of developed nations, where the market is characterised by a highly competitive environment and a stable balance of interests between key stakeholders in the insurance relationships. The highly developed insurance markets of the US and UK are often referred to as examples (for more details, see “Infrastructure of the Insurance Intermediary Market Abroad”).

In such markets, an insurance broker acts, on the one hand, as a representative of the insurance service consumer, selecting the insurer and helping the insured in drawing and implementing the insurance contract. On the other hand, the broker also acts on behalf of the insurer, where the insurer provides the broker with certain authorities, i.e. the broker may perform the entire set of legal and hands-on activities in facilitating the achievement of the optimal combination of interests between the parties to the insurance/reinsurance contract. It is important to emphasise that the broker must ensure that its activities are transparent and advise the client in advance that it performs certain functions on behalf of the insurer.”

(A.Y. Laikov, Deputy Chairman of the Board, Association of Professional Insurance Brokers, member of expert the council for the development of competition in the financial service market under the Federal Anti-Monopoly Service of Russia)



Infrastructure of the insurance intermediary market abroad

The international association of insurance intermediaries, BIPAR, was created in 1937, uniting national associations of professional insurance intermediaries (agents and brokers). BIPAR is headquartered in Paris and has a permanent secretariat in Brussels. BIPAR's main tasks are to assist the development of national associations of insurance intermediaries, coordinate their activity, participate in the development of insurance legislation, assist in international contacts of insurance intermediaries, etc. Currently, BIPAR's members are 50 national associations from 32 countries that unite about 250 thousand professional insurance intermediaries and intermediary organisations operating across the globe. Ukraine is the only former Soviet republic that is a member of BIPAR (The Association of Professional Insurance Intermediaries of Ukraine joined BIPAR in 1998) [15].

Unlike in Russia, foreign companies have been dealing with insurance brokers for a long time. Moreover, insurance intermediary services have become more vital and in demand due to the development of the global insurance market. Today, foreign insurance companies and customers tend to turn to insurance brokers more often. Customers seek assistance with the selection of the best offer with payment guarantees while reliable insurers seek their help in developing the insurance business.

International corporations usually have a risk management department. When acquiring complex insurance products, they understand that not all commercial insurance products come off the shelf. They need customised risk transfer instruments, where the price and terms are negotiated with each customer individually. Insurance against such risks may be a lengthy and sometimes complex process. Buyers of complex insurance products rely on their insurance broker to fully understand their needs for insurance coverage and to find a solution to best suit these needs. An insurance broker is appointed as an independent trusted advisor that works

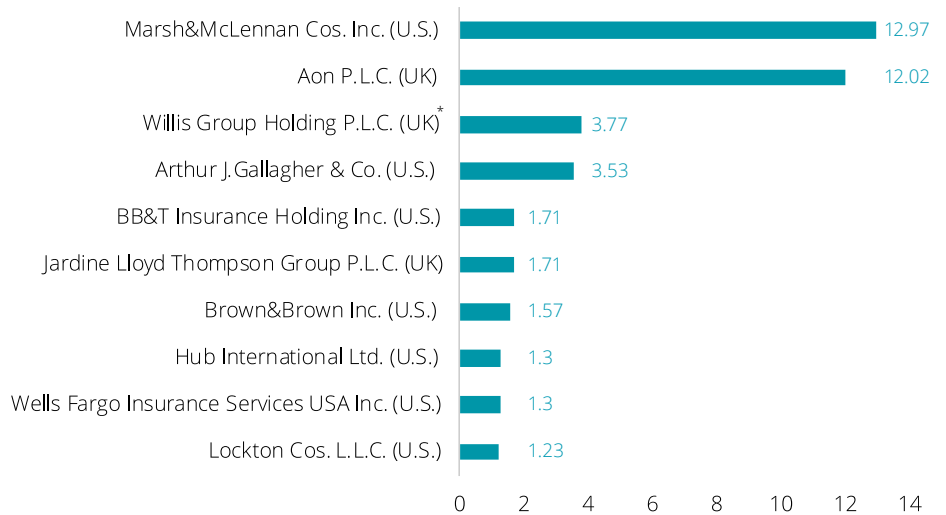
with insurance companies on behalf of the customer. Please note that, in addition to risk management, international corporations use insurance brokers to simplify the entire process of acquiring and maintaining the coverage. Their services include:

- Providing insured corporations with the information necessary to make an informed purchase/make informed decisions. Brokers explain what the company needs based on its risk profile and what options are available in terms of insurer, policy and price.
- Structuring insurance programmes, taking into account the risks faced by subsidiaries in various countries across the world.
- Assisting clients in developing alternative risk transfer mechanisms for risks that may not be insured in the commercial insurance market due to high cost or scope of coverage.
- Using their knowledge of insurance markets, customer risks and long-term cooperation with insurers to acquire and maintain the insurance coverage of costly and often unique risks specific to international corporations and complex industry groups, such as in the oil and gas sector.
- Assessing the insurer's ability and availability to provide adequate risk coverage.
- Ensuring that the corporate governance system is in compliance with legislation, including tax legislation.

Therefore, corporate insurance brokers represent their customers at all stages of the risk management process, including:

- Assisting customers with risk assessment;
- Implementing risk mitigation measures;
- Identifying and assisting with the acquisition of insurance products or risk management systems;
- Managing the claim settlement process.

Figure 3. Global insurance broker rating (by annual revenue in 2015, USD billion) [19]



* After the Willis and Towers Watson merger, the company has been operating as Willis Towers Watson

The largest players in the insurance broking service market abroad

We prepared a rating of leading insurance brokers in the world, based on the global revenue data for 2015 (see Figure 3). Thus, the main players in the international insurance broking market are:

- Marsh and McLennan;
- Aon;
- Willis;
- Arthur J. Gallagher.

Industries where global leaders operate are the same for the leaders of the Russian insurance broking market. The largest insurance brokers provide insurance, reinsurance, risk advisory services and complex risk management to leading companies in the most complex and economically important industries in the country:

- Space and aviation;
- Mechanical engineering;

- Energy and resources;
- Services and entertainment;
- Finance;
- Agriculture
- Healthcare;
- Marine sector (fleet);
- Pharmaceutical industry;
- Chemical industry;
- Energy;
- Public sector;
- Railway transport;
- Real estate;
- Retail;
- Technology and telecoms;
- Transport and logistics.

It should be noted that the leading positions (by annual revenue) in different countries are held by virtually the same companies.

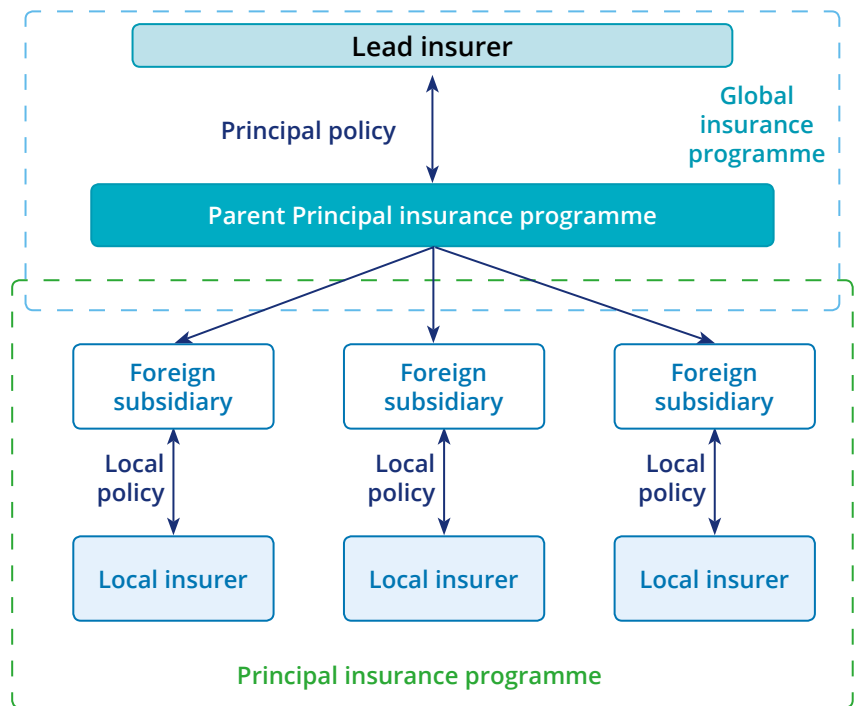
One of the reasons for this is the use of international insurance programmes. Many large corporations turn to international programmes to standardise how their insurance is managed across the world and ensure that they are confident in the level of insurance coverage for the entire business. The coverage may be in the form of a complex set of insurance policies that may be received only from a limited number of insurers; so the broking (support) services are a decisive factor in this process (see Figure 4).

An international insurance programme is a centralised and unified insurance programme that unites an insurance programme of the parent with insurance programmes of its foreign subsidiaries. A single principal international insurance policy is usually issued for each class of insurance, and respective local policies are issued in countries that require a local insurance policy.

The need to have separate insurance policies in certain countries may arise because of:

- National legislation requirements, such as labour compensation rules;
- Risk appetite in a certain region that is lower than the risk appetite of the parent. In this case, additional coverage is purchased to further reduce risk in the region;
- Coverage of risks that is excluded from the principal international programme.

Figure 4. International insurance programme



Source: Deloitte analysis

- The structure of such programmes is often very complex and international corporations rely on the insurance broker to ensure that the programme:
 - Accounts for risks better, is in line with best practices and consistent across the group;
 - Complies with legal requirements, including tax legislation, which may differ from country to country and should be fully met by companies;
 - Is adequate for the group's risks;
 - Is effectively managed, as the programmes require administration and coordination across jurisdictions.

Legal aspects of insurance broker markets abroad

The process of entering into contracts and the principles of pricing are the same as in Russia. The cost of broking services abroad is different from Russia in terms of the maximum price (according to tender documentation):

- Prices for broking services for the largest companies abroad vary from USD 450 thousand to USD 1 million.

Corporate insurance brokers are economically independent market participants that cooperate with multiple insurance companies. Their activities are strictly regulated. To avoid a financial interest in placing customer's risk with its "own" companies and to protect the insured from the broker's unfair behaviour, government insurance and antitrust supervision bodies abroad may control brokers' agreements with large insurers and monitor the dynamics of their financial flows. Moreover, some countries have established legal restrictions: insurance brokers may not be founders of insurance organisations, individuals may not combine work for an insurance company with broking activity, etc.

Legal grounds for the regulation of insurance intermediary activity are set out in special insurance legislation. Insurance legislation may differ from country to country. Thus, all EU member states have a legal requirement that insurance intermediaries must have passed minimum special training. Insurance brokers are subject to obligatory registration and entry into the state register virtually everywhere.

Some countries make registration obligatory for agents as well (such as Italy). The activity of insurance brokers is generally regulated by the government more rigorously than that of insurance agents [2]. There are two principal models of supervision and regulation of insurance broking activity on the international market:

- Anglo-American: a very rigorous regulation system that originated from the UK and Canada, where brokers play key roles on the market;
- Continental: minimum regulation of insurance intermediary activity (Germany, Italy, Spain, etc.). Insurance agents dominate in these countries, and brokers play secondary roles.

In recent years, the national legislations of various countries have become more harmonised. European integration as part of the EU is an important driver of this process. The EU has adopted intergovernmental regulations, with the principal ones in the area of insurance intermediary regulation: the EU Directive on Intermediaries, Commission Recommendations on Insurance Intermediaries, etc. However, the specific contents of these requirements differ by country, e.g. the minimum period of professional education varies from two weeks to several months from country to country. Insurance supervision bodies (jointly with public and self-regulated organisations of insurers and intermediaries) are in charge of the monitoring professional training and development of intermediaries. They approve training course curricula, qualification requirements, examination procedures, etc. It is worth noting that the qualifications of individual brokers and heads of broking organisations are subject to the most rigorous control, and requirements for agents who combine jobs are less strict. Moreover, sometimes persons with extensive experience in insurance brokerage may be exempt from the special training requirement.

Let's look at the international practice of insurance broker regulation in a number of countries that are most similar to Russia (in terms of infrastructure, geography, climate, economy and history): the US, Canada, the UK, Germany and France.

US

In the US, intermediaries are relatively independent and agencies that sell insurance policies are independent insurance market participants.

Insurance operations are regulated at the state level. At the federal level, federal standards are set, which are usually ignored by the states when creating their own legislation. The US is a striking example of a federation with a decentralised governance model. The principal document that defines the procedure for insurance regulation in the US is the federal McCarran-Ferguson Act of 1945 (15 U.S.C.A. §1011), which guarantees non-intervention by federal authorities in the regulation of insurance relations by states, and determines that federal law may be applied only to insurance relations not regulated at the level of specific states. Control and supervision over the activity of insurance brokers are the responsibility of state insurance departments that issue licenses.

In the US, agents (and agencies that unite them) may have varying levels of independence by law:

- Insurance company agents work for one company, represent its interests and usually not only sign a contract but also continue to serve the client after the contract comes into effect.
- Independent agents may work simultaneously with several insurance companies, selecting the best insurance coverage for the client with various types of insurance.



Canada

In Canada, regulation mainly applies to insurance brokers and is performed at two levels:

- General requirements are set at the federal level, such as the obligatory permit for broking operations, and a provision prohibiting a broker to participate in the management of an insurance company;
- The main authority is delegated to provinces and territories.

A self-regulated organisation, the Insurance Broker Association of Canada (IBAC), has significant influence over insurance broking practices, advocating the interests of insurance brokers with the government and ensuring an appropriate level of broker qualifications across the country.

Each province has its own association. They send representatives to the IBAC, which regulates the activities of brokers operating at the federal level as well as the development of regulatory standards recommended for regional associations. Furthermore, the IBAC is responsible for the confirmation of insurance specialist qualifications and lobbying insurance broker interests at the legislative level. In accordance with the federal act that regulates broker activity, broker associations have been set up as self-regulated organisations since 1980.

UK

Brokers are widely represented in the life British insurance market.

The UK has a complex system for regulating insurance broker operations, as insurance brokers are vital market participants. The system dates back to the dawn of the modern insurance system with its roots in marine insurance. Brokers later moved to other industries and now act as the principal sales channel for most types of property insurance.

The UK's brokers are subject to obligatory registration and receive licenses, which

are renewed annually by the Insurance Brokers Registration Council (the Council) established in 1977. Its functions, delegated by government, include broker registration and register keeping. In addition to the Council, broker activities are regulated by a number of self-regulated and public organisations that engage in standard setting and the development of professional broking activity rules, participate in education and the review of insurance intermediary qualifications, etc.

A number of rules that are non-existent in other countries have been put in place in the UK to protect the rights of the insured. Brokers, like insurers, are subject to obligatory audits. An insurance broker must have insurance for its professional activity. In certain cases, if an insurer files for bankruptcy, some of its liabilities that are owed to the customer are paid through contributions of the brokers that contracted with them. In addition, the Council includes an investigative committee and a discipline committee, which are charged with identifying instances of breaches of brokers' fiduciary duties to their clients and the application of penalties, which may involve the prohibition to engage in intermediary operations and exclusion from the register.

Germany

In Germany, only insurance brokers are subject to registration with the insurance supervision authorities. The activity of insurance agents is not supervised by insurance supervision authorities, but is fully regulated by contracts between the insurer and the agent executed under federal law. By law, three types of agents operate in Germany:

01. Working with one company only;
02. Working with several insurers (hence, able to be more discriminating in selecting an insurance product for the customer);
03. Part-time agents for which an insurance company is not the only or principal place of employment; they usually perform their agent functions in addition to other professional or public service.

France

France has an insurance system that contains elements from both the UK and continental models and relies on its own methods of insurance intermediary regulation. As in Germany, government regulation is minimal. Agents are the predominant type of intermediary. Their statutory activity is controlled only by the insurers that engage them. Brokers that account for nearly 20 percent of all the contracts in the market are controlled by self-regulated organisations rather than by insurance supervision authorities.

With regard to the requirements for the qualifications of broker license applicants, it must be noted that unlike the procedure currently in place in Russia, countries with the Anglo-American legal system do not require a candidate to have higher/vocational economic/legal or any other education. Virtually anyone who has attended a special training course and

passed a test may receive an insurance broker license. An obligatory condition for engaging in broker activity is to have financial guarantees that are achieved by using civil liability insurance.

An analysis of the results of different studies about the legal status of insurance brokers in countries with the Anglo-American legal system suggests that there are material differences from the legal status of the insurance broker in the Russian Federation.

Taking into account the differences in the legal status of the insurance broker in Russia and in countries with the Anglo-American legal system, we can conclude that the experience of legal regulation of insurance broker activity in the US, Canada and the UK may be partially used in Russian legislation

Trends

- Although different countries have different practices with regard to working with insurance brokers, the market leaders ratings are nearly identical.
- Transactions with the participation of brokers account for more than 60 percent of market insurance premiums.
- The number of brokers is five to six times higher than the number of insurers.
- Price levels for broking services for the largest companies abroad range from USD 450 thousand to USD 1 million.
- Brokers are spread quite evenly geographically – in large cities.
- Broking activities cover the corporate and retail market segments.
- The share of national brokers is the largest in the market.
- In the West, from 10-20 percent (continental market model) up to more than 50 percent (Anglo-American market model) of insurance premiums come through brokers.
- The insurance broking institution is virtually non-existent in countries like Japan, South Korea, China and India.
- Despite the differences in the legal status of the insurance broker in Russia, the Russian insurance broker market infrastructure is more similar to that of the UK, US and Canada, as insurance broker services in these countries may be provided both by commercial organisations, regardless of the legal form and independent consultants (individuals), which is in line with the Russian law enforcement practice.



Insurance broking services in the oil and gas sector

The scale and impact of risks in the oil and gas industry are unique compared to other sectors of the economy.

Although the leading insurance brokers have a wide range of clients in various industries, this report will focus on the international aspect of insurance broking operations in the oil and gas industry. As of today, there are four international insurance brokers with a strong knowledge of and expertise in the oil and gas industry as well as large-scale business, matching the oil and gas context (listed in the alphabetical order):

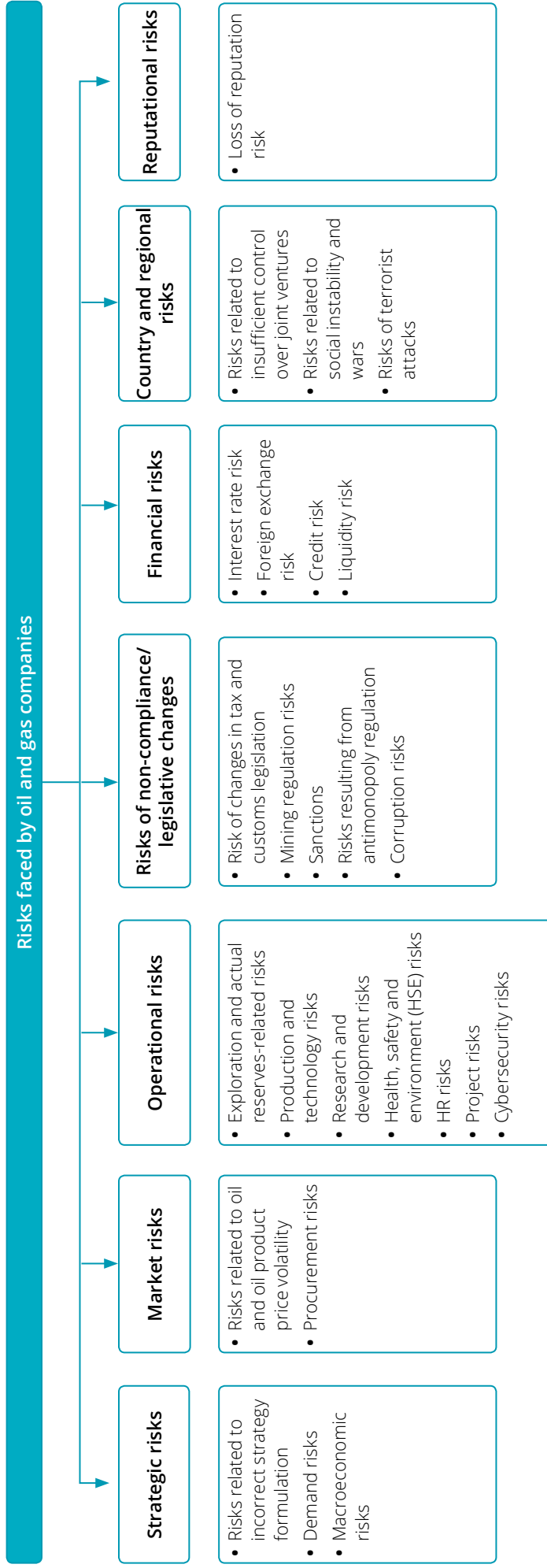
- Aon plc is the leading global provider of risk management, insurance and reinsurance broking, and human resources solutions and outsourcing services.
- JLT is one of the world's leading providers of insurance, reinsurance and employee benefits related advice, broking and associated services.
- Marsh implements and develops the concept and practice of client representation through insurance brokerage and risk management.
- Willis Towers Watson is a leading global advisory, insurance and re-insurance company.

Key aspects of risk management in the oil and gas industry

Risk management is a process of making management decisions aimed at identifying events that may affect companies, managing risks associated with such events, as well as controlling the risk appetite and providing reasonable guarantees for achieving company objectives.

The oil and gas industry is exposed to a whole variety of risks: a fire at a pumping station, a ship colliding with an iceberg, or loss of control over a deep-water well. We outlined the key risks that oil and gas companies currently face (in Figure 5).

Figure 5. The oil and gas industry risk map



Strategic risks are those that pose a threat to a company's sustainable growth. Strategic risks result from incorrect formulation of the company's strategy and inaccurate assessment of external market conditions, changes in supply/demand, as well as general macroeconomic trends.

Market risks are driven by a number of external factors that are beyond the control of oil and gas companies, i.e., mainly, crude oil and oil product prices. Market risks are related also to the acquisition of commodities and services from monopolistic suppliers, including electricity and infrastructure services (pipelines).

Operational risks comprise the following:

- Exploration risks and the risks related to confirmation of reserves stem from high uncertainty, as the external audit of reserves does not guarantee that reserve estimates will coincide with actual reserves, which may affect the financial and operating results (reserve growth, replacement ratios) in the long term.
- Production and technology risks arise from equipment faults caused by tear and wear, or late response to incidents resulting in losses from business interruption.
- Research and development risks—the success of new projects involving the production of hard to recover reserves, and deep-water projects depends on the ability of the company to develop and apply new technologies and methods.
- Health, safety and environment (HSE) risks comprise potential accidents at wells, refineries and gasoline stations, representing a major risk group, given that all production takes place at hazardous facilities, while the materialization of such risks would entail serious financial and reputational damage.

- HR risks—the success of new and technically sophisticated projects is a function of employee qualification and knowledge, as well as the company's ability to retain new talent, while a shortage of qualified professionals may slow down the company's growth.
- Project risks—oil and gas projects are long-term and capital-intensive; efficient implementation, compliance with deadlines and proper project management are key to the sustainable financial standing of the company.
- Cybersecurity risks—the widespread use of IT systems in the company's daily workings/processes implies higher requirements for security, as any unauthorized incursion in the system may result in reputational and financial loss, as well as disruption of operations.

Risks of non-compliance/legislative changes comprise the following:

- The risk of non-compliance/changes in tax and customs legislation include potential changes in MET, VAT, profit tax, as well as custom export and import duties.
- Mining regulation risks arise from potential changes in licensing terms, potentially resulting in the early termination of rights for the use of resources, lack of equal access to the development of offshore fields, fines for non-compliance with license agreements, and lengthy approval of project and financial documentation.
- Sanctions introduce restrictions on conducting business in some regions, bans on the purchase/sale of equipment and technologies, affecting outcomes of sophisticated projects.
- Risks resulting from antimonopoly regulation arise from potential changes in or failure to comply with antimonopoly regulation, as well as accompanying restrictions.

- Corruption risks stem from violation of anti-corruption and money laundering legislation and may result in administrative or criminal prosecution against employees or the company itself.

Financial risk is the risk of financial loss in the course of financial operations:

- Interest rate risk—oil and gas companies are major borrowers, often receiving loans at LIBOR-linked interest rates; a change in the LIBOR rate may increase debt service costs.
- Foreign exchange risk—fluctuations in foreign exchange rates may affect the company's results denominated in the local currency.
- Credit risk arises from late fulfillment of financial obligations by counterparties.
- Liquidity risk results from high volatility in oil prices, oil products, profitability of petrochemical products, changes in supplier rates and prices, leading to discrepancies between plans, budgets and investment programs.

Country risks relate to the company's operations in a given region or country:

- Risks related to insufficient control over joint ventures—statutory requirements for setting up joint ventures with local companies result in lower control over projects.
- Risks related to social instability and wars arise in countries with a high level of social and political tensions.
- Risks of terrorist attacks—operations in the regions with high terrorist activity may expose the company to subversive acts directed against the company's employees and property.

Reputational risks include potential loss of reputation as a result of the company's operations and the actions of its employees and third parties.

Managing risks in the oil and gas industry consists of the stages applicable to other industries, i.e., identification, analysis, monitoring and management per se. However, risk management in the oil industry has its specifics.

It is worth noting that similarly to other sophisticated industries, there is a large number of intermediaries involved in the risk management processes in the oil and gas patch, and the preliminary analysis of those intermediaries may significantly improve the quality of insurance broker choice. Due to the very complex risk map of oil and gas companies, as well as their interdependence on various economic, social, political, environmental and other consequences, it is critically important to be aware of the entire risk management process: who will be involved, how deep is their knowledge of the oil and gas industry (it will be especially important in the event of an investigation of risk-event related circumstances), as well as the tools and experience required for conducting independent expert reviews and calculating insurance settlements. Hence, the risk settlement is a key stage in reviewing risk management in the oil and gas industry. Here, it is important to note the role of insurance adjusters.

Insurance adjusting companies are independent entities engaged in settling insurance claims resulting from insurance events. Insurance adjusters investigate all circumstances relating to insurance claims in order to verify the claim and the conformance to the insurance contract, calculate the insurance claim amount to be paid, prepare the expert summary for the insurer (insured), participate in the claim settlement jointly with the representative of the opposite party (insured or insurer). Adjusters launch their own practices, work as employees of specialty adjusting companies (so-called independent adjusting companies), or are employed by insurance, broker and major trading companies as risk management department specialists.

Internationally, the specialists engaged in the independent settlement of claims are traditionally split into two categories:

- Independent adjusters — persons or entities nominated by insurance companies to settle claims;
- Public adjusters — persons or entities representing the interests of the policyholder in the process of settling claims presented to the insurer.



There is a subtle, but important difference in the definitions of the independent and public adjuster.

The independent adjuster does not represent the interests of the insurer but only executes assigned tasks. Conversely, the public adjuster represents the interests of the policyholder and acts on the latter's behalf when performing the duties.

Returning to the risk assessment stage, let's look at the risk identification and analysis process in the oil and gas industry in greater detail.

An insurance survey of tangible assets, especially large ones, e.g., refineries, terminals, offshore rigs, lies at the core of any risk management programme in the oil and gas industry.

Insurance surveyors – specialists possessing large experience in the industry – come to plants, evaluate the condition and location of facilities, compliance with technical guidelines, technology features and talk to the personnel.

The assessment of potential risks affecting the refining and petrochemical industries is subject to many factors: the location and the age of the factory, natural and climatic conditions, management quality, equipment depreciation, investments in upgrades, product properties, etc. In this respect, both plants and standalone production sites are unique from the standpoint of risk assessment. Therefore, each case deserves a separate review.

Based on the data obtained, the surveyor prepares a risk assessment report. The report assesses the physical condition of the production facilities, plant management quality, key risks from the standpoint of physical damage, the calculation of the maximum potential loss and provides recommendations on improvements in risk management quality.

The insurer needs to calculate the probable maximum loss (PML) in order to clearly understand the amount required to cover potential claims in the event of serious losses, albeit a full destruction of major facilities (e.g., refineries) is almost impossible. The PML calculation allows company management to define liability limits for the purchased coverage, making it possible to earn a reasonable profit on collected premiums, as compared to buying full coverage.

Risk tolerance is another important criterion related to the financial ability to cover losses resulting from unforeseen developments. Risk tolerance is the level above which the business may suffer losses. There are different methods for covering losses. The most popular method is to set a minimum 3-5 percent deviation range for EBITDA. In the end, the decision on the risk tolerance level is made by company management, influenced also by the realities of insurance markets if the tolerance level or the amount the deductible are defined for insurance purposes.

For example, insurance markets are not prepared to offer deductibles below a certain level.

On the Russian market, the deductible in insurance plays a token role and does not fully perform the core functions. The deductible is used as an instrument of reducing the costs for insurance companies and encourage policyholders to exercise prudence and responsibility with respect to the insured item. Thus, many property risks of major energy companies are insured using low deductibles (from USD 50,000 to 100,000). The deductible rates in Europe and the US are dozen times higher.

Expert commentary

The franchise amount is the key factor that determines eligibility for reinsurance abroad. For example, Russian companies are generally reinsured on the international market (in particular, in the Western countries) if the franchise amounts to more than EUR 1 million. However, the franchise amount necessary for reinsurance is significantly higher in the oil and gas sector (more than EUR 5 million). Low franchise level may lead to an inadequately high increase of the reinsurance rates for companies.

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After key risks have been identified and evaluated, they can start to be managed. Risk management, particularly the management of physical risks, includes, among others, the following aspects:

- The physical upgrade of the equipment, introduction of higher production safety standards;
- Improvement of facility management procedures;
- Partial re-allocation of risks to contractors (if possible and economically feasible);
- Financial planning and insurance.

Given our focus on insurance broking in the oil and gas industry, we will consider the specifics of insurance for oil and gas companies.

The oil and gas insurance industry is different from all others in that not a single insurance company in the world is able to issue an insurance policy for a large petrochemical complex all on its own.

The advanced nature of oil and gas insurance comes from high revenue and margins and, therefore, higher risks, all of which contribute to the demand for insurance services. Experts see oil and gas insurance as a highly competitive market. At the same time, it remains relatively stable.

There are certain types of insurance that oil and gas companies may buy in order to protect their operations and personnel, or are obligated to acquire in accordance with legal requirements, lender demands, or contract terms.

The main and most common type of insurance for refining and petrochemical companies is property insurance for most risks (besides the ones directly excluded under the insurance contract terms). First of all, those are nature-related and technology-related risks, such as fire, lightning, flood, earthquake, explosion, etc. Additionally, vehicles and equipment are insured from breakdowns and accidents. Insurance against this type of risk is one of the principal types of insurance for industrial companies. Nevertheless, oil and gas companies differ due to the uniqueness and high cost of their fixed assets, which is taken into consideration when setting the limits for insurance coverage. For example, due to high margins in the refining and other oil and gas industry segments, oil and gas companies often purchase insurance against the risks stemming from the interruption of business operations resulting from breakdowns and accidents and the respective losses. In this case, the insurance covers lost profit..



Terrorism and sabotage insurance has been gaining popularity in Russia, where almost all insurers offer coverage of these risks. Environmental risk coverage moved up on the agenda, too, providing liability insurance for owners of hazardous production facilities in the event of environmental damage as a result of accidents, as well as insurance against potential expenditures related to accident containment and emergency mitigation.

The insurance terms of all insurance companies differ only slightly, i.e., coverage extensions that insurers can offer for a

given policy and additional options that depend on the capabilities of a given insurer. Oil and gas companies sometimes allocate certain amounts in their budgets for insurance. In certain cases, they set a fixed amount for which the insurance company selects an optimal insurance package.

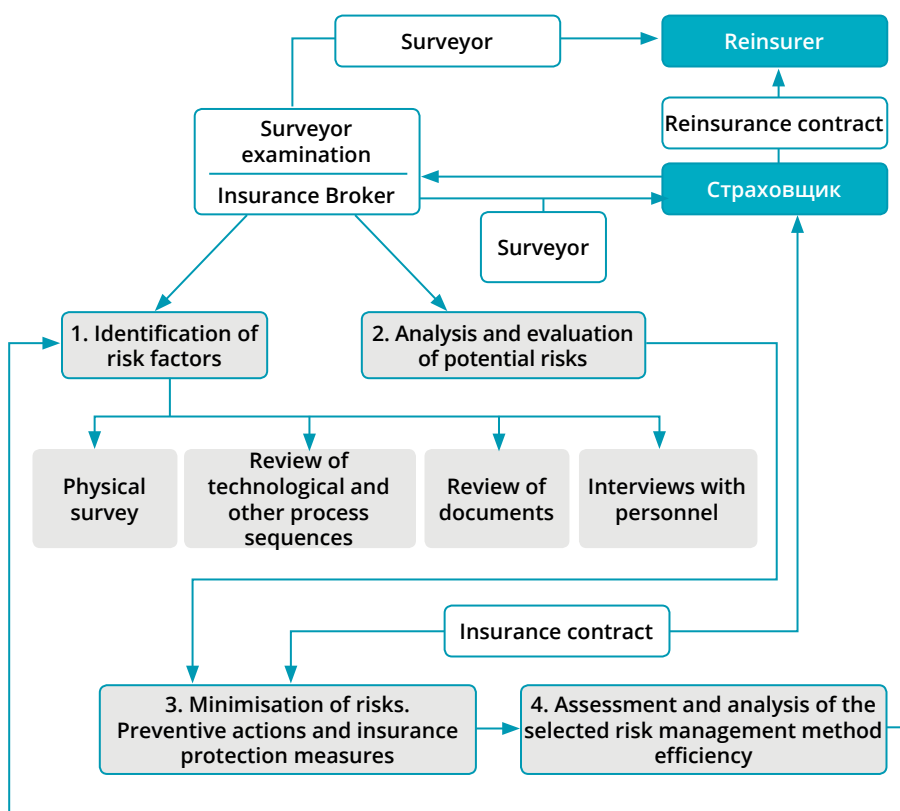
The types of purchased insurance (such as property damage, vehicle breakdown, business interruption liability) and limits depend on the needs of a specific company but are determined by a number of common factors (see Table 3).

Table 3: Insurance choice factors

Factor	Comment
Risk exposure	Only the necessary insurance is purchased. For example, companies that do not drill for oil and gas should not buy well insurance.
Contractual obligations	The company may be obligated to purchase insurance that it would not otherwise choose. For example, in project finance, lenders may request that the company purchase full property damage or construction coverage, as well as insure against a potential loss of profits resulting from commissioning delays. However, the company may believe it can handle such risks by itself, making its own judgment with regard to the need for insurance.
Financial capacity depending on risk tolerance	Major diversified companies with strong balance sheets may buy an insurance franchise at USD 50 million and sometimes refuse to buy insurance at all. Smaller companies buy coverage with a significantly lower franchise.
Risk tolerance	Purchasing any type of insurance coverage depends both on the financial capacity of the company and the company policy toward the balance of risks and insurance expenses. In the absence of legal or internal risk management requirements there are situations when smaller oil companies engage in exploration drilling, spending a significant percentage of their capital, opt for no well insurance despite the high probability of the risk of a well going out of control.

Oil and gas companies fall into a separate category as they have to reinsure the major part of the risks. Coinsurance and reinsurance play an important role in the insurance protection of oil companies. We reviewed the reinsurance market as a key component of risk management in oil and gas companies in more detail. The key risk management stages, including reinsurance are presented in Figure 6.

Figure 6. Key risk management stages, including reinsurance



Reinsurance provides an opportunity to balance the insurance portfolio and protects the insurance company from incurring major losses and accumulating small costs. The key advantages of reinsurance are as follows:

- Fragmentation of major risks;
- Clarification of financial consequences in the field of insurance.

However, reinsurance cannot increase the sustainability of the insurance company capital, as the reinsurer itself may become insolvent and show insufficient capital adequacy.

According to the latest data cited by Finmarket, in 2015 the global reinsurance market reached USD 575 billion. The world oil and gas reinsurance market capacity is only about USD 2 billion. A significant market share was held by the 'Big Four' reinsurance companies:

- Munich Re;
- Hannover Re;
- Swiss Re;
- Scor Re.

Major reinsurance companies' significant influence on the market (e.g., General Colon Re and Lloyd's syndicate) was the reason for an increase in the number of

reinsurance companies in the countries with offshore zones.

British experts believe that the reinsurance market will soon face changes comparable to the banking crisis of 2008, pointing to the insufficient quality of the natural disaster risk portfolio [35].

All 'Big Four' global reinsurance companies operate in Russia. However, in the summer of 2015, Munich Re announced that it will close its representative office in Russia. As for treaty reinsurance, the company will continue to operate only in the marine reinsurance segment. In other segments, it plans to switch to facultative reinsurance. Munich Re is a holder of almost all Russian risks.

According to experts, a number of factors influenced Munich Re's decision to exit the Russian market, including the small size of the domestic reinsurance market and the continuously growing number of risks. In particular, technological accidents tend to happen more often at Russian plants. The reinsurer had to pay large amounts in settlements due to the disaster at Sayano-Shushenskaya Hydro Power Plant in 2009 and the flooding of the Zagorsk pump-storage plant in 2013. The litigation after the latter accident between the company and RusHydro and Ingosstrakh continues because the reinsurer does not consider the accident as an insured event, while the insurers have not determined the amount of the payment yet.

As at 2015, the top Russian reinsurers included the following companies:

- SOGAZ;
- Ingosstrakh;
- Capital Insurance.

Despite all the efforts of major Russian reinsurers, the global market remains the key platform for reinsuring domestic risks. Generally, over two thirds of the premiums in Russia go to foreign-based reinsurers. Nowadays, the global reinsurance market hubs are located in the US, UK (London), Central Europe, Japan and Bermuda. Western reinsurers traditionally remain the key partners of Russian cedents. The lack of capital on the part of local reinsurers is

the key reason for reinsuring Russian risks abroad. However, the majority of market participants believe that the capacity of the domestic market should be increased in order to transfer less risks abroad and mitigate the risk of reinsurance rate growth (if losses increase globally), especially in the environment of mounting currency risks and rouble devaluation. In order to achieve this, incentives for increasing insurance company capital could be provided, or national reinsurance companies could be set up in one form or another, with colossal reinsurance potential. The latter trend is observed in the Chinese reinsurance market, which takes a rather cautious stance toward reinsuring Russian risks, considering the Russian industrial business insufficiently transparent.

According to market experts, the representatives of Asia's reinsurance market overall agree with this point of view (the aggregate share of risks reinsured in China and the rest of Asia is estimated at 10-15 percent)..

Expert commentary

Taking a simpler approach to understanding the role of the insurance/reinsurance broker and omitting complex formats of non-proportional reinsurance, we can compare the cost of reinsurance services to the cost of insurance services.

A situation is possible when an insurance broker is included in the chain only at the reinsurance stage and consequently represents the interests of the insurer by optimising the cost of reinsurance services to cut the insurance 'cost' for the insurer. However, if oil and gas company has developed a relationship with an insurance broker, the latter is supposed to optimise the reinsurance costs and acts to cut the insurance cost for the policyholder. Hence, the presence of the insurance broker in the insurance market chain is pre-determined, the only question is about the exact place of the broker in the chain. So, if the company wants to optimise the cost of insurance services, the cooperation with the insurance broker would be the key to achieving this goal.

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The analysis of expert opinions makes it possible to single out intrinsic issues related to the transfer of domestic risks to the Western reinsurance market:

01. Cedents prefer to enter into proportional (quota share) insurance agreements in the Russian market, while in the US and Europe they usually sign non-proportional (on the excess of loss basis) insurance agreements.
02. In the Western markets, they tend to underestimate the technical potential of fixed assets in Russia, showing low awareness of high-tech achievements in Russia, especially in the aviation and space industries.
03. In continental Europe, reinsurers usually agree to work with Russian risks underwritten in accordance with the insurance rules licensed in Russia. However, in London they are not always willing to review and reinsure the risks on Russian terms. In some instances, this makes the London market inconvenient, or even unacceptable for Russian cedents even if the parties succeed in agreeing on the insurance premium rate.

The key mechanisms for resolving the above-mentioned issues include the use of independent insurance surveys and independent rating agencies.

The insurance survey system has not taken shape yet in Russia. In the event of major losses, many companies cannot engage leading international surveyor companies, while the loss calculation performed by the cedent is often disputed, which should not be the case in well-organised markets. This results in the lack of trust between cedents and reinsurers to the detriment of the reinsurance business.

Some Russian rating agencies operating in the insurance market discredited themselves by assigning artificially high ratings to insurance companies for opaque reasons. Others were compromised by working under the patronage of public insurance associations. That said, independent ratings are the only source of unbiased information for cedents that they can use for management purposes.

According to the latest estimates by Expert RA Rating Agency, the size of the Russian reinsurance market was expected to grow to RUB 54 billion in 2015. Moreover, experts forecast interesting market developments after a new entity – the state reinsurance company, which will be partially owned by the Bank of Russia – is established. [36]

According to Expert RA Rating Agency, the future of the Russian reinsurance market will depend on the following possible

outcomes resulting from the establishment of the state reinsurance company:

- If insurers are obligated to transfer risks to the state reinsurance company, the industry will be essentially nationalised and its efficiency will decrease.
- If the state reinsurance company assumes only sanction-related risks and is privatised after the sanctions are lifted, the Russian reinsurance market would grow and its efficiency would rise.

It is worth noting that whatever approach is taken, companies with adequate risk assessment and management systems are going to succeed. Insurance is not the only obligatory instrument for managing risks but it always allows the insured entity to redistribute unplanned expenses resulting from unforeseen situations into annual scheduled insurance expenses, which provide a reliable protection for the balance sheet and net profit [20, 21, 22]. In this respect, we are going to consider one of the key ways to increase the efficiency of oil and gas insurance – engaging insurance brokers.



Advantages of engaging insurance brokers in the oil and gas industry

The use of insurance brokers has advantages for oil and gas companies, mostly due to the brokers' expertise in covered risks and ability to assist in implementing suitable insurance programmes.

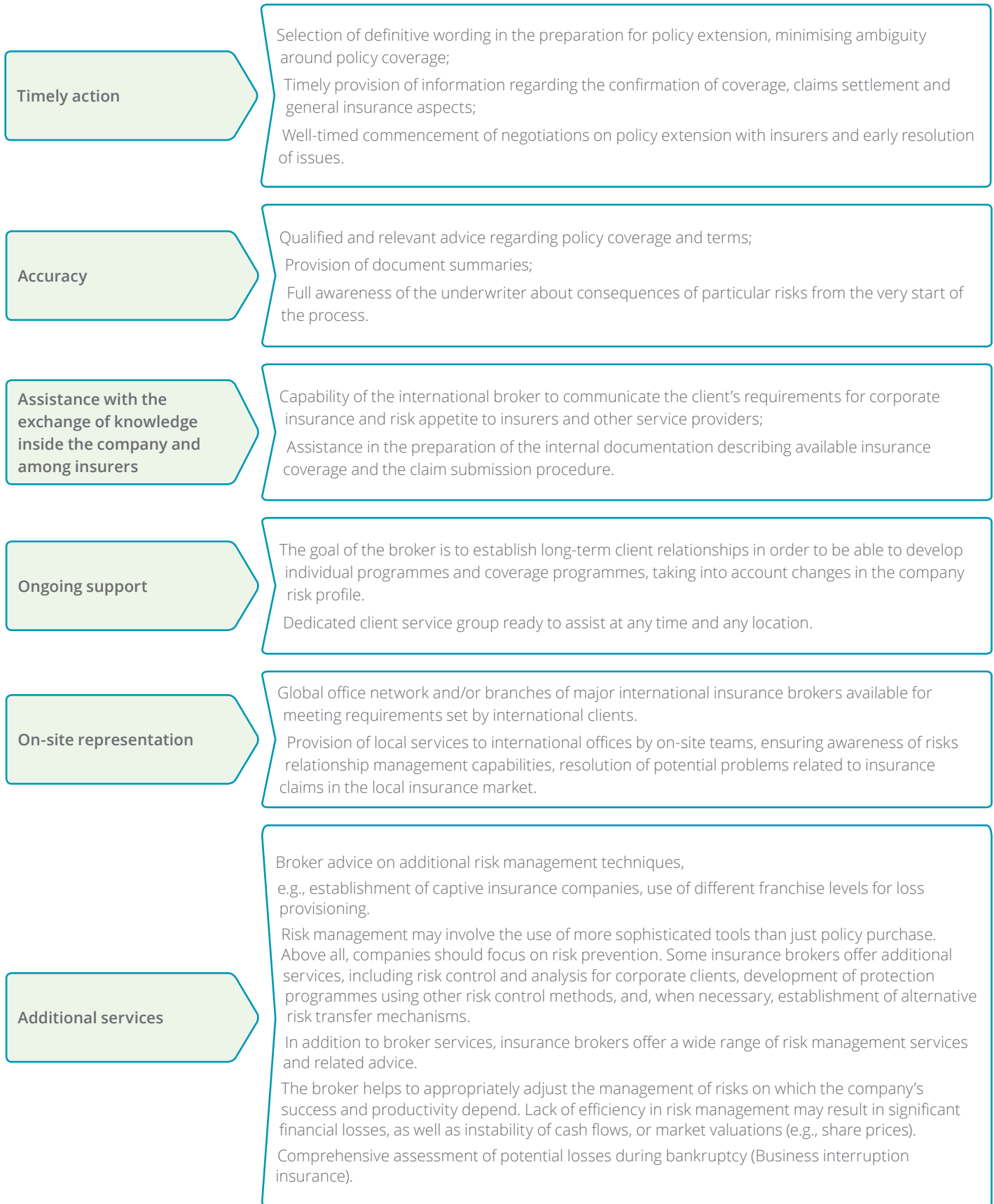
- While understanding the needs of oil and gas companies, insurance brokers collect and evaluate information related to the purchase of an insurance programme, premiums and history of insurance claims; they perform these functions on behalf of the insured parties.
- Insurance brokers inform their clients about the protection provided within the acquired insurance coverage, available insurance options and optimal ways to acquire and structure insurance policies. Thus, insurance programmes can be structured differently in order to optimise premium costs and coverage levels. Brokers possess the knowledge of international programmes and are capable of offering the structure which optimally matches the risks faced by international companies.

- Insurance brokers assist clients in selecting suitable insurance programmes, offering different coverage options within a policy, various terms and available insurance companies. Independent external advice allows international corporations to choose a right risk management approach based on the consulting services and insight provided by the broker.
- Moreover, the insurance broker may provide insights in addition to the insurance and risk management information already available to the company, facilitate the transfer of knowledge to the company personnel and increase awareness of advantages from purchasing an efficient insurance programme.

The advantages of a business relationship with insurance brokers is presented on the chart below (Figure 7).

Figure 7. Advantages of a business relationship with insurance brokers





Trends

- The scale and impact of risks in the oil and gas industry are unique compared to other sectors of the economy.
- The oil and gas insurance industry is different from all others in that not a single insurance company in the world is able to issue an insurance policy for a large petrochemical complex all on its own.
- Factors impacting the selection of an insurance system:
 - Risk exposure;
 - Contract commitments.
 - Financial potential, depending on the risk tolerance level;
 - Readiness to accept risks.
- Oil and gas companies fall into a separate category, as they have to spend the larger part of premiums on reinsurance; therefore, coinsurance and reinsurance play an important role in the insurance protection system of oil companies.
- Key advantages of reinsurance:
 - Fragmentation of major risks;
 - Streamlining financial performance in the insurance segment.
- More than two thirds of premiums reinsured in Russia are paid to foreign insurers abroad as Russian reinsurers lack capital.



Practices of insurance broker selection in the oil & gas industry

As mentioned in the first section of the report, the demand for insurance broking services is highest in the technically complicated types of insurance, such as oil and gas risk insurance, marine insurance, spacecraft insurance, aviation liability insurance, insurance of construction and assembly operations, etc.

In 2014, at least 36 percent of the insurance premiums for aviation liability insurance was collected under contracts brokered by insurance brokers while for international freight insurance, the share of such contracts was at least 16 percent.

In this context, insurance broker selection is of particular concern for companies representing the largest industrial sectors of Russia's economy. In this report, we analysed the process of selecting the insurance broker in the oil and gas sector.

Competitive environment and insurance broker selection criteria in Russia

Most insurance brokers in Russia are still not willing to disclose information on their activities, which serves as evidence of market immaturity (information on open bidding in Russia is presented in Table 4).

Table 4. Fees for insurance broking services in the oil and gas sector

Type of procurement	Customer industry	Supplier	Fee (RUB)	Geography
Insurance agency and broking services	Oil and gas industry	Willis CIS Insurance Broker LLC	78,000,000	Russia
Request for proposals in electronic form (joint procurement)	Oil and gas industry	Willis CIS Insurance Broker LLC	17,473,389	Russia
Property insurance, civil liability insurance for the principal and insurance broking services	Oil and gas industry		190,000,000	Russia
Industrial lending services	Financial institutions and insurance	RT-Insurance Insurance Broker LLC	48,524,590	Moscow
Insurance agency and broking services	Financial institutions and insurance	Mart Financial Broker LLC	60,000,000	The Khanty-Mansijsk Autonomous District - Yugra
Insurance agency and broking services	Financial institutions and insurance	Smolensk Financial Broker LLC	10,000,000	The Khanty-Mansijsk Autonomous District - Yugra
Other life insurance services, except for life reinsurance	Financial institutions and insurance	Malamut Insurance Broker CJSC	84,681,000	Moscow
Insurance agency and broking services	Financial institutions and insurance	INFULL Insurance Broker LLC	10,000,000	Moscow
Other life insurance services, except for life reinsurance	Financial institutions and insurance	Willis CIS Insurance Broker LLC	54,288,000	Moscow
Insurance agent and broker services	Financial institutions and insurance	Tyumensky Insurance Broker LLC	20,000,000	The Khanty-Mansijsk Autonomous District - Yugra
Insurance agent and broker services	Financial institutions and insurance	CJSC GrECo JLT Insurance Brokers	10,000,000	Moscow
Non-life insurance	Mining and chemical industry (manufacturing sector)	Atomic Insurance Broker JSC	49,330,000	Krasnoyarsk region
Reinsurance services	Financial institutions and insurance	Aon Rus-Insurance Brokers LLC	280,744,000	Moscow
Civil liability insurance	Mining and chemical industry (manufacturing sector)	Atomic Insurance Broker JSC	16,556,400	Krasnoyarsk region
Civil liability insurance	Federal State Unitary Enterprise Mining and Chemical Plant	Atomic Insurance Broker JSC	16,556,400	Krasnoyarsk region



The analysis of bid proposals for broking services in the most efficient way to identify the criteria behind broker selection, second only to personal expert interviews. Thus, the analysis of bids for 2012-2016 suggests that each company has its own preferences when it comes to selecting an insurance broker.

Apart from the contract price, companies (both Russian and foreign) want to be sure the broker understands their business, can represent their interests before the insurer, holds an insurance policy and will

support them for an agreed remuneration if there is a need to submit insurance claims.

When selecting an insurance broker, the company has to take into account a number of factors whose relative importance depends on its specifics and requirements. Selection criteria depend on what the customer hopes to get from the insurance broker and which services and opportunities they regard as most valuable.

Table 5 below provides some examples of potential questions considered when selecting an insurance broker (Table 5). They need to be adjusted with regard to company specifics after a detailed consultation and analysis of factors that are important for the oil and gas company when establishing relations with an insurance broker.

Table 5. Potential broker selection criteria

Criteria	Potential focus areas
Broker's qualification and geography	Experience in purchasing coverage for energy clients (energy companies);
	Broker's key strengths and presence on every market where the oil and gas company operates;
	Competitors served by the same broker;
	Flexibility and ability to meet the strategic needs of the oil and gas company, including ability to serve the company worldwide.
Services offered and the team	Approach to customer service;
	Roles and responsibilities of key members of the broker's proposed client team;
	International team coordination and the structure of the acquired international coverage.
Basic broking services	Understanding the specific nature of the oil and gas company and its risks;
	The structure of the suggested insurance programme;
	Additional services for the oil and gas company, e.g. risk and claim management.
Remuneration model	Proposed remuneration structure, including the principles of calculation and level of compensation;
	The structure of compensation for additional services, such as claim management and its internal distribution.

There is another classification of insurance broker selection criteria in Russia (this classification is also applied abroad). It envisages a more detailed evaluation of the insurance broker reliability (Table 6)

Table 6. Potential criteria for evaluating an insurance broker’s reliability

Criteria	Description	Comment
Reputation	The reputation of a particular company can be determined by referring to official professional portals and rating platforms.	Experts advise companies to look beyond information published on the broker’s official website as it does not meet the independence criteria.
Years in business	This information is available on the company’s official website and in the official enterprise databases (e.g., SPARK).	
Good broker history	The broker’s history can be found by searching for court cases in the Consultant Plus system.	
Licensing	This criterion is essential in guaranteeing professional integrity. All licenses can be requested directly from the insurance broker.	Broker licensing procedures enable filing claims and complaints to the relevant authorities. All developed countries have such regulatory bodies. For instance, in the UK it is the FSA (Financial Services Authority); in the US it is the CFTC (Commodity Futures Trading Commission). In Russia and the CIS, there is virtually no control over currency market participants’ operations.
Conflict regulation procedure	Judicial conflict regulation should be set out in the broking service contract. Important note: To assess the insurance broker’s reliability more efficiently, experts recommend introducing an evaluation stage for adjusters, as they are key participants in the conflict regulation procedure (please see below).	As mentioned above, the complicated nature of the oil and gas industry risk field directly affects the formalisation of the conflict regulation procedure if risks arise. Risk management in oil and gas industry is discussed in greater detail in the Risk Management Specifics in the Oil and Gas Industry section.
Availability of an insurance policy (from a highly rated insurance company)	Professional liability insurance	The insurer is responsible for: <ul style="list-style-type: none"> • Indemnifying third parties for personal injury pursuant to Russian legislation and within the bounds of insurance coverage and the insurance limit set in the insurance contract; • Indemnifying for litigation expenses in respect of cases dealing with compensation for harm within the bounds of insurance coverage and the insurance limit set in the insurance contract. A specific feature of this type of insurance is that the insurer is liable not only for insured events occurring during the insurance contract term but also during the six months following its expiration.

Determining the weight of each criterion is an important part of the insurance broker selection criteria map analysis. In Russian practice, a 100-point evaluation scale is generally used to evaluate each criterion.

For each criterion, a weight measure is assigned for evaluation in addition to a formula for calculating the number of points given for such criteria, or a scale of maximum weight numbers describing change intervals or the method for determining them.

The table below shows the most popular criteria for evaluating insurance brokers in the oil and gas industry along with the weight of each criterion (data obtained through analysis of bid documents from the official Russian state procurement website) (Table 7).

Table 7. Russian insurance broker rating matrix

Criteria	Weight	Indicator
Experience working with oil and gas companies' insurance on the Russian market over the last three years	0.1	Duration less than a year — 2 Duration from 1 year to 2 years — 1 Duration over 2 years — 0
Experience with loss adjustment in the oil and gas industry over the last three years	0.1	Yes — 1 No — 0
Availability of skilled oil and gas insurance specialists (Broker profile)	0.1	Less than three specialists — 0 points From three to seven specialists — 50 points Eight or more specialists — 100 points
Availability of skilled oil and gas insurance specialists (Engineer profile)	0.1	No specialists — 0 points From one to four specialists — 50 points Five or more specialists — 100 points
Positions overlapping: founder (owner), director and/or chief accountant positions are held by one person	0.05	Positions overlapping — 1 No positions overlapping — 0
Willingness to provide the customer with access to the necessary informational resources	0.05	Required access to information on: a) The structure and quantitative measures of insurance coverage, peer organisations similar to the customer (in placement structure, insurance coverage, limits, franchise, cost, etc.). b) The loss incurred and claim paid in the oil and gas industry; c) The legislative changes, generally accepted insurance contract wordings affecting the customer's insurance coverage, launch of new insurance products (provide a free form letter signed by an authorised signatory of the participant).
The participant or its subsidiaries/associates/parents has recommendation letters from oil and gas companies (Russian or foreign) with turnover of at least USD 1 billion, specifying the address and contact details of the risk manager (on the company letterhead).	0.1	Less than three recommendations — 0 points From three to five recommendations — 50 points Six or more recommendations — 100 points
Level of risk according to the due care index on the basis of SPARK-Interfax data ¹	0.07	Extremely high risk — 2 ² High risk — 12 Average or below average risk — 0
Absence of profit in the reporting period	0.1	Negative profit or break-even in the reporting period — 1 Positive profit in the reporting period — 0
Absence of profit in the prior period (year)	0.1	Negative profit or break-even in the prior period — 1 Positive profit in the prior period — 0
Tax arrears not higher than 1 percent of balance sheet totals	0.2	Tax arrears — 1 No tax arrears — 0
Contract price	from 0.3 to 0.7	

¹ For Russian non-residents, based on similar systems applied in the potential supplier's registration jurisdiction

² Potential indicators or prudence index based on SPARK-Interfax: low risk (1–29)/moderate risk (30–49)/average risk (50–69)/high risk (70–89)/extremely high risk (90–99).

Table 8 summarises the typical criteria for evaluating the financial standings of the insurance broking services provider [29].

Таблица 8. Типовые критерии оценки финансового состояния поставщика

Description	Conclusion on the potential supplier's financial standing			
	Solid financial condition	Reasonably solid financial condition	Unstable financial condition	Extremely unstable financial condition
	Level 4	Level 3	Level 2	Level 1
Financial stability index (capital + long-term liabilities)/liabilities	≥0.80	0.40-0.79	0.01-0.39	≤0
Leverage ratio (capital/liabilities)	≥2.00	0.60-1.99	0.01-0.59	≤0
Current liquidity ratio ((current assets - long-term liabilities - VAT paid)/current liabilities)	≥2.00	1.40-1.99	1.00-1.39	≤0.99
Creditworthiness index	≥3.00	2.40-2.99	1.81-2.39	≤1.80



Moreover, the list of criteria for insurance broker selection is complemented with mandatory requirements that the insurance broker should meet:

01. The bidder has all the necessary licenses and clearance certificates for the supply of goods and provision of works and services pursuant to the effective Russian legislation (for a foreign participant, pursuant to the legislation of the country of its location) and its requirements.
02. The bidder has an occupational safety system in place.
03. Requirements for the occupational safety system.
04. No requirements for the quality management system (quality management, assurance, and control) of the bidder or manufacturer of goods is established.
05. Requirements for professional experience:
 - A. Experience with broking services contracts for manufacturing companies in the Russian Federation to develop and support property and loss insurance programmes resulting from business interruption, with a total volume of services no less than RUB 60 million (for the period from 1 January 2010 to 31 December 2012).
 - B. Experience organising insurance pay-out under property and loss insurance programmes resulting from business interruption on Russian oil and gas facilities of at least RUB 500 million over the last five years (for the period from 1 January 2008 to 31 December 2012).
06. Requirements for equipment and other material resources: The bidder or its subsidiaries/associates/parents should have an effective professional indemnity insurance contract or policy with an insurance limit of no less than USD 100 million.
07. Requirements for human resources: appointment of an account manager, personal manager, and five specialists in charge of brokerage contract support who have at least five years of experience with property and loss insurance programmes for business interruption.
08. Requirements in respect of other resources:
 - A. The bidder or its subsidiaries/associates/parents should have an active accreditation on international insurance market.
 - B. Absence of prescriptive orders by a state regulator introducing limitation, suspension or recall of insurance broking services license.
 - C. At least five reviews from oil and gas companies confirming the bidder's successful experience in supporting the property and loss insurance programmes for business interruption dated not earlier than 1 January 2013.
09. At the time of procurement (from application submission to contract signing with the winner) the bidder should not be included in the supplier blacklist pursuant to the Federal Law "On Placing the Orders for Supplies of Goods, the Performance of Work and the Rendering of Services for State and Municipal Requirements" No. 94 FZ of 21 July 2005).
10. At the time of procurement (starting from the application submission to contract signing with the winner) the bidder should not be included in the supplier blacklist pursuant to the Federal Law "On Procurement of Goods, Work and Services by Certain Types of Legal Entities" No. 223-FZ of 18 July 2011.
11. The bidder should not be undergoing wind-up proceedings (for a legal entity) or have an insolvency (bankrupt) status.
12. Absence of seizure of the bidder's property (to the extent necessary for contract performance) and absence of suspension of operations.
13. Requirement to submit the certification of a self-regulatory organisation that have issued to the bidder the relevant certificates for certain types of work.
14. Requirements to potential bidders as part of the prudence concept prescribed by the Finance Ministry³ and the Federal Tax Service⁴ of the Russian Federation.

³ Letter of the Russian Ministry of Finance No. 03-02-07/1-197 of 03 August 2012

⁴ Letter of the Federal Tax Service No. AC-4-2/17710 of 17.10.2012 "On Exercising Prudence Principles When Selecting

Competitive environment and criteria for choosing an insurance broker abroad

The popular view is that brokers represent the main channel for selling insurance in industrially developed nations. Brokers are the most qualified professionals in the insurance field; they have a solid understand of the intricacies of various type of economic activities. They often act as qualified risk managers, thereby significantly reducing insurance costs for policyholders. With such an intermediary between insurers and policyholders, corporations may get by without hiring in-house risk management specialists.

In the UK, the US, Canada, France, Switzerland and a number of other countries, brokers hold the main share of the corporate insurance business. As noted above, in these countries there are over ten insurance brokers per one insurer.

Although Russia did not adopt the Anglo-American legal system, the Russian insurance broking market closely resembles those of the UK, the US and Canada.

Table 9 provides some examples of fees for insurance broking services in the oil and gas industry (or for the country's largest manufacturing companies) (based on the latest published global bids).



Table 9. Insurance services fees in the oil and gas industry

Type of procurement	Customer	Supplier	Service fees	Region
Broking services	Hidden information	Hidden information	EUR 234,500	Australia
Broking services	Hidden information	Hidden information	EUR 173,618	South Africa
Broking services	Real estate	Galilea Puig Group Associated Insurance Brokers SA	EUR 98,956.01	Spain
Broking services (municipal services)	Real estate	MARSH SPA	EUR 485,000	Italy
Broking services (real estate: property damage and liability)	Real estate	Collect Assur Nayaradou SARL	EUR 94,187	France
Insurance broking services	Hidden information	Hidden information	EUR 20,700	UK
Broking services (fleet: legal protection)	Real estate	Groupama Antilles Guyane Fort-de-France	EUR 87,867.2	France
Broking services (transport and logistics)	Transportation and investment sector	WILLIS TOWERS WATSON	EUR 879,999	Canada
DK-Aalborg: Insurance brokerage services	Hidden information	hidden	EUR 122,300	Unknown region
I-Termoli: Insurance brokerage services	State infrastructure sector	hidden	EUR 540,000	Unknown region
I-Viterbo: Insurance brokerage services	Pharmaceutical sector	hidden	EUR 147,242.52	Unknown region
F-Libourne: Insurance brokerage and agency services	Hidden information	hidden	EUR 1,350,000	Unknown region
Belgium-Herve: Loan brokerage services (386015-2014) – dgMarket – Uzbekistan	Real estate	hidden	EUR 1,600,000	Unknown region

International practices for selecting an insurance broker in the oil and gas sector abroad have much in common (in particular, the contents of criteria maps). However, it is important to note that the analysis of international practices of insurance broker selection has revealed that foreign companies give priority to the intangible assets of the insurance broker. Foreign colleagues include the following factors to such criteria:

- The company's reputation on the market (in most cases, based on official independent rating agencies);
- The quality of the customer base (specialisation, focus on manufacturing companies with complex operations);
- Customer loyalty (e.g., period of servicing one client, frequency of repeated contracts);
- New client growth rate (given a high share of previous year clients);

- Insurance broker's membership in professional associations and its expert reputation on the market (media publications, company's expert comments on insurance market trends, etc.).

In addition, the analysis of insurance broker rankings abroad enables us to highlight a new trend: clients' business's increased interest in the weighted average data of insurance broker's financial performance. This trend is prevalent in large corporations where the broker's experience in servicing large companies is essential (higher average price of one contract, the concentration on the market in a specific industrial group, etc.).

The table below shows a criteria map for insurance broker selection describing the international practice (Table 10).



Table 10. Typical criteria for selecting an insurance broker internationally

Criteria	Comment
Experience in servicing the industry	It is necessary to select a broker staffed with specialists in the required industry that have experience working with companies of the selected sector. It does not mean that the company should focus exclusively on one industry, yet care should be exercised in selecting a company that has a good understanding of industry specifics and works with other companies in the sector.
Company size and the insurance broker's business book	An insurance broker's size and its financial performance indicators hint at the company's capability to offer its clients the best market rates, insurance coverage, and services. Therefore, it is necessary to analyse how well the broker and its local office in particular fit your company in terms of volume and range of services.
Evaluating the broker's reputation	When selecting an insurance broker, you need to consider the reputation of the broker and employees who will service your company. For instance, attention should be given to the following factors: has the broker developed a code of conduct and compliance policy, do the employees know how the broker encourages compliance with ethical business practices and what is the broker's market reputation in terms of integrity and service quality.
Recommendation inquiry and verification	This criterion helps to filter out brokers not meeting high market demands. It is reasonable to ask the broker to provide recommendations and client reviews. A high-profile professional broker will easily describe its service record and provide proof of the high quality of its services.
Broker's professionalism	The broker should be aware of all types of insurance coverage and policies available on the market to provide client-specific recommendations. The broker's task is to ensure that the client gets maximum insurance coverage at minimum insurance costs. Therefore, it is essential to select a broker who has accumulated considerable information and is willing to share it with the client and advise the client on any questions. Moreover, the broker should correctly assess and understand all risks of its client and be able to communicate them to insurance companies to receive best offers [33].
Broker's resources	A professional insurance broker has sufficient resources to provide the client with all information on the insurance policy the client needs and its impact on the client's business. The role of the insurance broker is different from that of the insurance company; therefore, it is important to determine what additional resources it has to add value to your company. For instance, the ability to provide assistance with claim handling, risk management services, cooperation with professional services providers etc.
Cost of services	Companies select a broker who offers the best market price.

We should not forget the contribution made by European companies in developing a new qualitative block for assessing the insurance broker – a scoring system. As it is the case with any practice, eventually this mechanism was adjusted and modified to become more comprehensive and robust. The tables below provide examples of scoring cards to evaluate the data received from insurance brokers as well as a questionnaire for the scoring system evaluation (Tables 11, 12).

Set of expert questions for the scoring model:

- Is the broker focusing on servicing energy companies?
- Is the broker staffed with a robust team to organise the process and ensure control?
- What is the number of people on the team and what is their experience with the broker’s organisation?
- Has the broker provided recommendations of other clients from the oil and gas market, clients registered on stock exchanges, or clients with a risk profile similar to the company?
- What is the quality of recommendations provided?
- What services has the broker provided to its clients and how long was their cooperation?
- Does the broker possess sufficient capabilities to answer potential demands and requirements of the oil and gas company (e.g., prospective acquisitions, opening of new foreign offices)?
- Has the broker provided examples of similar situations where they had to introduce changes to the required services because requirements changed?
- Is the broker able to ensure its team’s readiness to meet increasing demands?
- Has the broker demonstrated its willingness to establish a partner relationship with an oil and gas company?
- Is the broker’s insurance limit sufficient if the oil and gas company applies for an insurance claim?
- Has the broker set the limits of its liabilities (if a claims settlement situation arises)?

Table 11. Broker evaluation scoring model (summary)

Evaluation criterion	Max rating	Broker 1		Broker 2		Broker 3		Broker 4	
		B	P	B	P	B	P	B	P
Company information	10%	0%	0%	0%	0%	0%	0%	0%	0%
Team and service offering	30%	0%	0%	0%	0%	0%	0%	0%	0%
Remuneration pattern	30%	0%	0%	0%	0%	0%	0%	0%	0%
Key services	30%	0%	0%	0%	0%	0%	0%	0%	0%
Total weighted score		0%	0%	0%	0%	0%	0%	0%	0%

B — rating after considering bidding documents
 P — rating after broker’s presentation

Table 12. Broker evaluation scoring model (examples of key criteria)

Evaluation criteria	Max. rating	Broker 1		Broker 2		Broker 3		Broker 4	
		B	P	B	P	B	P	B	P
Experience purchasing insurance coverage for energy companies	35%	0%	0%	0%	0%	0%	0%	0%	0%
Ability to provide recommendations from existing clients	20%	0%	0%	0%	0%	0%	0%	0%	0%
Demonstrated flexibility and ability to respond to the company's strategic needs and requirements, including ability to service the company worldwide.	25%	0%	0%	0%	0%	0%	0%	0%	0%
Level and nature of professional indemnity coverage	20%	0%	0%	0%	0%	0%	0%	0%	0%
Total	100%	0%	0%	0%	0%	0%	0%	0%	0%
Итоговая взвешенная оценка	10%	0%	0%	0%	0%	0%	0%	0%	0%

Therefore, the key difference in the foreign practice of insurance broker selection is increased attention to the intangible characteristics of the insurance broker's position. Foreign companies give priority to reputation risk, current and former client

loyalty, experience in purchasing insurance coverage for clients and other intangible characteristics of the insurance broker's business. For an in-depth assessment of the intangible component, foreign companies apply scoring techniques to

evaluate brokers. The efficiency of scoring evaluation is higher before the collection of tender documentation as it enables to assess the broker within its everyday operations (prior to the special preparation for the bid).

Integration of results: General broker selection matrix

The integrated results are presented in the insurance broker matrix selection

criteria, which takes into account Russian and international practices considered earlier. The weight of each indicator was determined on the basis of tender documentation analysis (both in Russia and abroad). The weight of each criterion

was derived from the share in the weighted average assessment by indicator. The screening block was considered separately, and each weight for the block was determined based on the sum of weights of the indicators (Table 13).

Таблица 13. Интегральная матрица критериев выбора страхового брокера

Criterion	Indicator	Assessment method	Max. score	Min. score	Weight of the criterion
Qualifications and resources	Experience purchasing coverage for energy clients (energy companies)	Desk research	3	0	9%
		Broker's presentation			
		Interview with insurance broker's managers			
		Reference requests from previous clients			
	Years in business	Desk research	2	0	
	Experience in loss adjustment in the oil and gas industry	Desk research – security check through systems (Kronus, ...)	2	0	
	Availability of skilled oil and gas insurance specialists (professional standard: insurance broker, specialty: engineer)	Upon personal request of information from the broker	2	0	
	Presence of insurance policy from an insurer with a high reliability rating	Desk research	2	0	
		Request of licenses from the broker			
	Key strengths	Desk research	2	0	
		Broker's presentation			
		Interview with insurance broker managers			
	Competitors served by the same broker	Desk research	1	0	
		Broker's presentation			
		Interview with insurance broker's managers			
Flexibility and ability to meet the strategic needs of the oil and gas company, including the ability to serve the company worldwide	Personal communication with the broker	2	-2		
Understanding the specific nature of the oil and gas company and its risks	Analysis of proposal	3	-3		
Proposed insurance programme structure	Analysis of proposal	5	0		
Additional services for the oil and gas company (risk and claim management) proposal	Analysis of proposal	1	0		
Roles and responsibilities of the key participants of the proposed client team	Personal communication with the broker	1	0		
International team coordination and the structure of acquired international coverage	Personal communication with the broker	1	0		

Criterion	Indicator	Assessment method	Max. score	Min. score	Weight of the criterion
Integrity, reputation	Level of risk according to the due care index on the basis of SPARK-Interfax data	SPARK-Interfax	3	-3	12%
	Licensing	Desk research	1	0	
		Request of licenses from the broker			
	Good broker history	Desk research - security check through systems (Kronus)	4	-4	
		Reference requests from previous clients			
Commercial court practice	Check through security systems	4	-4		
Geographical coverage	Presence in each of the markets where the oil and gas company operates	Desk research	3	0	10%
		Broker's presentation			
		Interview with insurance broker managers			
Financial position	Company profit	Financial statements	4	-4	13%
	Statistics on tax arrears not higher than 1% of balance sheet totals	Financial statements	2	-2	
		Statements from the accounting department (upon request to the broker)			
	Credit history (creditworthiness index)	Check through security systems	3	-3	
	Financial stability ratio (Capital + long-term liabilities)/liabilities	Financial statements of the broker	3	-3	
	Leverage ratio (Capital/liabilities)	Financial statements of the broker	3	0	
	Current liquidity ratio ([current assets - long-term liabilities - VAT paid]/current liabilities)	Financial statements of the broker	3	0	
Price	Proposed remuneration structure, including the principles of calculation and level of compensation	Analysis of proposal	10	0	56%
	Structure of compensation for additional services, such as claim management and its internal distribution	Analysis of proposal	10	0	
	Contract price	Analysis of proposal	20	0	

Selecting an insurance broker for companies operating in extreme conditions with high synergy of risks (with the Arctic oil and gas sector as an illustration)

Today, any type of economic activity is prone to various risks, including those ensuing from the human impact on fragile environmental systems in these territories with high risk synergies and susceptible to heavy social and economic consequences of abusive nature management: the exhaustion of mineral deposits, dwindling productivity of biological resources and reduced biodiversity as a result of extensive harvesting and the deteriorating environment.

The risks stem both from general causes common to “normal” territories (mainly due to the discrepancy between industrial and managerial technologies and current resource management systems and best global practices, as well as the failure to leverage positive environmental practices of traditional farming) and from the specific nature of conducting business in extreme climatic conditions. The latter relates to the “pocket” nature of development of the territory and its resources, wide use of shift labour, high excessive concentration of economic and social facilities on limited territories, as well as remoteness and inaccessibility. Risks associated with industrial development in the areas of traditional habitat and farming of indigenous peoples in extreme geographical zones deserve additional discussion.

According to experts (V.Y. Silkin, A.N. Tokarev and V.V. Shmat), “... known risks of industrial development cannot be compared to those that are expected to accompany the wide-scale industrial development of oil and gas resources in offshore Arctic areas and increasing transit transport flows.” For this reason, we suggest using the Arctic as an illustration and considering, in more detail, the

challenges that insurance brokers may face with oil and gas sector projects in extreme geographical zones. Furthermore, the Arctic is a good example of a clash of international interests.

Therefore, we will focus primarily on the high environmental risks of oil and gas operations in the Arctic’s extreme climatic conditions. First and foremost, these risks are associated with accidents and oil spills that occur during offshore operations and during transport by sea.

Firstly, these risks stem mainly from the above-mentioned extreme sensitivity of local natural ecosystems to man-induced impact. In the Arctic, low temperatures and a small number of sunny days per year slow down the rate of evaporation and the physical, chemical and biological degradation of pollutants. Therefore, the dangerous contaminants discharged to the environment as a result of an accident will be locked in the Arctic ecosystem for some time, thus increasing the risk of bio-accumulation, while ocean currents may facilitate the spreading of the pollutants across vast areas. Secondly, the risks are also driven by the remoteness of offshore facilities (for hydrocarbon production) and tankers (for oil transportation) from emergency response centres, severity of weather conditions (large ice sheet areas), and the limited availability of hydrographic and bathymetrical maps. The third reason for the risks is in the growing volumes of transportation and related risks of pollutant discharge to the atmosphere and water. Lastly, the fourth driver of high environmental risks is the lack of truly effective technologies for large oil spill clean-ups in the Arctic’s icy conditions not only in Russia, but also in other countries; which was evidenced by the Godafoss container ship oil spill off the coast of Norway and Sweden in 2011 and the South Korean Oriental Angel trawler spill near Chukotka shores in 2012. The existing surface oil collection technologies are ineffective in choppy sea and cold weather.

Oil spills on and under the ice are especially hazardous, as there are no effective decontamination technologies. With regard to oil spills in the Arctic during



ordinary sea operations, hydrocarbon concentration in the water will not change materially if we consider hydrocarbons already brought to the Arctic via ocean currents. However, conflicts over fish resources are possible, as fish and sea mammals tend to avoid sources of noise, e.g. generated by seismic studies, and drilling operations. To avoid conflicts of this kind, it is necessary to carefully time these operations. The heaviest environmental impact from onshore oil operations is inflicted by mechanical damage, including the fragmentation of local fauna habitats as a result of infrastructure – pipeline and road – construction.

Taking into account the scale of the potential mineral base, the occurrence of human-induced emergencies resulting from oil and gas operations in the Arctic's extreme climatic conditions is a likely prospect. The probability of emergencies is especially high if the long-term forecast for low oil prices does not realise for some reason. Then the implementation of action plans in accordance with the Paris Agreement is likely to be delayed, and the development of offshore resources is likely to regain attractiveness.

The crystallisation of environmental risks will entail financial losses and reputational damage for companies, as well as reputational and political risks for countries involved in the oil and gas projects, where Russia is playing a leading role. This scenario seems not to be in play yet, and the ecosystems of the Arctic seas and the Arctic Ocean generally appear to cope with the human-induced burden. However, if business operations were to intensify there, it is very hard to predict how the Arctic's ability to recuperate may change.

It should be noted that Russian oil and gas corporations clearly understand the importance of technological and environmental risks for their Arctic operations. Good examples are Rosneft's initiatives to work out a "Declaration on the Protection of Environment and Preservation of Biodiversity During the Exploration and Development of Mineral Resources on the Arctic Continental Shelf of the Russian Federation" (jointly

with Exxon Mobil, Statoil, Eni); and the Committee on health, safety and environment for exploratory operations on licensed areas in the Kara Sea that it has set up (jointly with Exxon Mobil). At the same time, drastic solutions to the problem will involve the development and use of innovative environmental technologies and knowhow, and foreign companies still remain the main source of such innovation in the domestic oil and gas sector. This model is not in the interests of Russia, because in the short term, it will make the development of the resource base more expensive, and in the long term it will increase dependency on foreign suppliers of technology solutions and equipment.

Moreover, one should not think that the above risks are limited only to hydrocarbon extraction and transportation. Unleashing the rich solid mineral resource potential of the Russian Arctic is associated with significant geological (the resource base is not proven), technological, environmental, financial and economic risks, with the bulk of recorded reserves concentrated in the large deposits of the Norilsk ore district.

The above features of risk typical for extreme zones, in particular, high synergy between technological, environmental, financial, economic and political risks and their consequences has material repercussions for all the stages of insurance and reinsurance. For this reason, the selection of an insurance broker in these situations is subject to a special regulatory process, in particular, a significant weight is given to the experience in assessing and insuring environmental risks and their consequences.

Hence, we suggest that special attention should be paid to issues of insuring against environmental and political risks, which are gaining importance in the current conditions of constantly growing scrutiny by the public and government, as well as by the tightening legislative stance with respect to those types of breaches, especially in the largest industrial and energy companies.

Environmental risk insurance

Environmental insurance is a type of insurance where the insurer is liable for the risks related to environmental damage.

Governments set the highest environmental safety requirements for the oil and gas industry in:

- Developed countries;
- Countries with delicate ecosystems;
- Countries with a large mineral resource base that has economic and social significance.

The consequences of environmental risks may be segmented into three levels:

- Effect at the environmental level;
- Effect at the level of third parties and the state;
- Effect at the property level.

Table 14 presents the list of insured events and measures necessary to mitigate the consequences at each level.

Table 14. List of insured events and mitigation activities

Level	Insured events	Coverage of the claimed loss
Coverage of own site	<p>Unforeseen and accidental pollution of the property site;</p> <p>Gradual pollution of the property site (new pollution);</p> <p>Gradual pollution of the property site (historical pollution);</p> <p>Environmental damage at the property site;</p> <p>Injury or damage to the property of contractors and third parties on the insured production site.</p>	<p>Mitigation activities and rescue and salvage operations;</p> <p>Payment for legal services; Production downtime;</p> <p>Clean-up and reclamation of land, underground water and bio-resources;</p> <p>Replacement of property damaged by pollution.</p>
Coverage of third party sites and damage to the state	<p>Damage to the property of third parties and the state from unforeseen and accidental pollution;</p> <p>Damage to the property of third parties and the state from spreading gradual pollution (new pollution);</p> <p>Damage to the property of third parties and the state from spreading gradual pollution (historical pollution).</p>	<p>Compensation of harm to health and damage to property;</p> <p>Compensation of the cost of property restoration;</p> <p>Production downtime and lost profit;</p> <p>Compensation of legal service costs.</p>
Coverage of statutory costs (environmental damage)	<p>Unforeseen and accidental pollution inflicting environmental damage; Gradual pollution that has spread to environmental sites;</p> <p>Historical pollution that manifested itself in the form of environmental damage;</p> <p>Environmental damage resulting from declared business operations.</p>	<p>Ecosystem restoration costs: clean-up and restoration to the pre-pollution state;</p> <p>Compensation measures based on tariffs and formulas;</p> <p>Quotas for pollution in excess of limits; legal service costs.</p>

A comparative analysis of environmental liability vs. other types of insurance coverage demonstrates that the load is higher for all types of loss (Table 15).

Table 15. Comparative analysis of risk consequences

Type of loss/cost	Public liability	Civil liability	Environmental liability
Cost of clean-up of own property	—	+	+
Cost of clean-up of third party property as a result of unexpected and unforeseen pollution	+	—	+
Compensation of environmental damage in accordance with legislation	—	—	+
Gradual and historical pollution	—	—	+
Costs to mitigate damage	—	—	+
Reclamation of water and land, Restoration of fauna	—	—	+

Source: Willis Towers Watson

monetary terms, according to the latest data, the total amount of known losses associated with environmental risks in the world for the period from 2009 to 2014

amounts to EUR 461.62 million (Table 16). Meanwhile, accidents at Russian oil refineries – on the basis of direct damage from accidents – from 2011 to 2016 (based

on large accidents over USD 5 million) are estimated to have cost more than USD 1.5 billion .

Table 16. Environmental risk loss statistics

Year	Number of incidents	Loss amount
2009	5	EUR 44,204,087
2010	2	EUR 43,521,000
2011	4	EUR 36,693,810
2012	1	EUR 1,335,000
2013	2	EUR 36,045,000
2014	2	EUR 2,225,000
2015	4	EUR 297,592,410

Source: Willis Towers Watson

analysis initiated by leading insurance broker market experts suggests that the most dangerous group – in terms of environmental risk– includes pipelines, chemical, mining, primary metal and steel facilities. The premium varies from 0.85 to

2.3 percent of limits, depending on the type of business activity and project specifics while the level of limits directly depends on the volume of business operations and the size of the maximum possible loss (Table 17).

Table 17. Environmental risk insurance practice

Company	Number of locations	Limits (for each case/in aggregate)	Deductible (for each case/in aggregate)	Type of business activity	Insured territory	Premium
A	25	EUR 100m	EUR 5m	Oil production and processing company	Entire world	EUR 1.2m
B	15	USD 50m	USD 400k	Mining company	USA	EUR 785k
C	2	EUR 25m	EUR 100k	Energy company	Europe	EUR 225k
D	40	EUR 40m	EUR 850	Pipeline	Western Europe	USD 624k
E	4	USD 75m	USD500k	Refinery	Western Europe	USD 1.3m
F		USD 500m		Oil production and processing company	Russia	
G		RUB 30bln		Gas production and processing company	Russia	
H		USD 50m		Oil production and processing company	Russia	

Source: Willis Towers Watson

Today, the issue of introducing mandatory environmental insurance, despite the high prominence of environmental risks and their consequences on the agenda of leading industrial companies in Russia, is at the active discussion stage between insurers and the Russian Ministry of Natural Resources and Environment (Russia saw the first attempts to develop and implement mandatory environmental insurance in 1994 and 2002).

Please note that in a number of countries, environmental insurance has been made mandatory by law or is specified as an option of obligatory financial guarantees. These countries include the US, Azerbaijan (from 2002), Kazakhstan (from 2005), and Turkmenistan (from 2011). Therefore, mandatory environmental

insurance guarantees that damages will be reimbursed and creates the necessary conditions and economic incentives for preventing oil spills and other polluting accidents. Insurance market participants are unanimous in their stance: insurance brokers (both in Russia and abroad) are of the opinion that environmental risk insurance should be mandatory. Furthermore, the practical aspect related to the development and implementation of specific governance and regulatory impacts on business processes cannot be overestimated.

Political risk insurance

Political risks come to the forefront in the context of global oil and gas reserves, with 70 percent of the reserves concentrated in the so called “strategic ellipse” (Arab Peninsula, Caspian basin and Siberia) – in countries with unfavourable investment climates and instable political authorities. At the same time, the growing geopolitical instability observed since the end of 2014 has had a significant effect across all industrial sectors both in Russia and abroad. As a result, even the commercial sector has become serious about political risks, and most investors in the energy sector have realised their prevalence and influence on global financial flows.

Looking at the experience of global oil and gas majors, one can see several options for political risk classification, but an absolute majority of businesses generally divide risks into internal and external ones.

When political risks are referred to, external or geopolitical risks come to the foreground. Threats and uncertainties can come both from hostile countries (and are usually of temporary nature) and from the negligence of international treaties and accords. On the face of it, assessing geopolitical risks appears to be an easy task: they can be quantified and priced, e.g., one can assess the risk of disruption in the energy supply or overpricing. But, upon more detailed consideration, these risks can stem from both an action by oil exporting countries, and local inter-ethnic conflicts or terrorist attacks. Moreover, global energy supplies may be posed at risk not only from exporting countries, their policies or

internal political situation, but also by international factors which affect global decisions (climate change summits, Doha round negotiations, etc.). So, it would be wrong to treat them as a purely external risk, as they may result from the political choices that the government has made.

In addition to external political risks, one should not underestimate the uncertainties that arise due to decisions made by politicians inside the country or alliances such as the European Union. It is better to

classify them according to the subject that influences a particular risk. There are three categories of subjects:

01. Legislatures;
02. The public which may vote in elections, referendums and other political procedures;
03. Executive and judicial authorities that enforce the existing rules and laws [37].

Going back to our example of refinery insurance on problem-ridden territories, we note that political and legal risks related to the limited and/or not fully delineated rights and jurisdictions of Russia over the respective territories are among the top risks when considering the Russian Arctic re-expansion megaproject.

The key problem has to do with the Arctic shelf, where a significant area between the Eastern meridional border and the 200-mile economic zone border is a disputable territory if the UN Convention of the Law of the Sea – adopted in 1982 and ratified by Russia in 1997 – is followed to the letter and the sectoral approach contained in a number of domestic regulations, starting with a Resolution of the Presidium of the USSR's Central Executive Committee of 1926 is abandoned.

At the same time, authoritative Russian legal theorists assert that the “provisions of the Convention not only recognise sectoral division of the Arctic, but specifically stipulate that “Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas” (Art. 234 of the Convention). It is also emphasised that there are no legal grounds to erase from the map the dotted lines delineating our Arctic zone.” [38]

Canada is a good example here, as it has always backed its rights to its Polar possessions with national legislative acts, in accordance with the sectoral principle. This example is all the more relevant because Article 24 of the UNCLOS, which regulates the navigation on the shelf zone, stipulates that coastal states have power within the limits of the exclusive economic zones in

such areas where the ice sheet is present for most of the year. This provides legal grounds for the introduction by Russia of a procedure of negotiation and payment of an obligatory duty for the escort of vessels which pass along the Northern Sea Route. The Russian interpretation of the provision is disputed by the US (they have not ratified the Convention). However, it is directly or indirectly accepted by other countries, such as Canada, which is engaged in a similar dispute around the North-Western, passage claiming that this passage lies within its inner waters and hence is subject to unlimited national jurisdiction, whereas the US and a number of other countries claim that these waters are international and foreign vessels have the right of passage there.

In this context, risks related to the use of international oil and gas production technologies warrant special attention. In a situation where the US, Canada and even Norway are cautious about tapping into the Arctic shelf, Russia, demonstrating undue haste in testing the seemingly reliable and effective technologies offered by the largest global companies, not only risks becoming dependent on the interests of those companies but also puts its international reputation at stake should something go wrong with Arctic offshore projects. As the environmental aspect is key for the global community in shaping its attitude towards Russian success in the Arctic, any incidents and their environmental consequences can serve as a basis for restricting Russia's sovereign rights in the Arctic with reference to UNCLOS (or with tougher measures), which will signify an end to any possibility to use the sectoral approach that gives Russia control over 1.7 million square kilometres of territory [39].

As a preliminary conclusion, environmental, technological, political, legal, natural and climatic risks that are common in extreme geographies may only be mitigated by solving the problem that the experts refer to as the strategic risk. This involves the selection of strategic approaches in answering the question: why does Russia need the re-expansion into the Arctic (or the Arctic generally) today.

Vladimir Leksin and Boris Porfiriev co-authored the new book titled "State Management of the Development of the Arctic Zone of the Russian Federation: Tasks, Problems, Solutions" (Государственное управление развитием Арктической зоны Российской Федерации: задачи, проблемы, решения) (2016) where they note a domestic treatise on strategic risks issued jointly by the Russian Academy of Science and the Russian Ministry of Emergency Situations in the early 2000s. This document refers to strategic risk as "...a measure of possibility that negative consequences may arise for the national security and sustainable development of the country following the adoption of ineffective or non-adoption of strategic decisions in the sphere of (general) state management." However, today's globalisation processes, the scale of operations of global oil and gas majors, and the never-ending pursuit of profits against the backdrop of the growing uncertainty of the political landscape in the developing countries increase the probability of error and poorly calculated strategic decisions (for example, as regards the selection of investment projects). Such errors may spark economic risks at the international level, as well as inflict serious financial losses on oil and gas corporations.

Due to the above, in the conditions of risk synergy (in particular, in challenging geographies) a strong risk insurance programme is a necessary, and is sometimes the only tool, to increase the efficiency of refinery operations. Conceptual approaches specific to insurance in such areas will primarily influence the parameters of insurance broker selection. As all the risks we have considered essentially come down to a considerable increase in the probability of strategic errors, which may have grave consequences, the following will be important in selecting an insurance broker:

- Higher importance of the geographical coverage criterion (due to the existence of international interests and the relation of the risks to the formal political and legal regulators in various countries);

- Higher importance of the financial position criterion (refinery risks in a problem-ridden area are associated with high costs in the event of an insured event);
- Higher importance of reinsurance (it follows from the point above; insuring oil and gas operations in such regions as the Arctic is likely to be characterised by a large number of reinsurers; we should note that refineries have an average of 15 large reinsurers);
- Higher importance of understanding the specific nature of oil and gas companies with production located in problem-ridden geographies (special focus should be on the process of loss adjustment and scenario approach to risk assessment);
- The insurance programme must be different from the general provisions, to account for specific geographical position and risk synergy (the proposed insurance programme must reflect the understanding of the specifics);
- Lower importance of the contract price (practice shows that the more complex internal and external business conditions, the lower the weight of the contract price criterion);
- Higher importance of assessments received from independent screening surveys (the flexibility of this method makes it possible to have a pool of questions associated with the issues of doing business in extreme geographic zones).

With that in mind, we suggest that the resulting insurance broker selection criteria matrix for the oil and gas sector should be customised to create a separate tool for insurance broker selection when insuring a business in a problem-afflicted geographical zone (Table 18).



Table 18. Integrated insurance broker selection criteria matrix for risk synergy conditions (problem-ridden geographic zones)

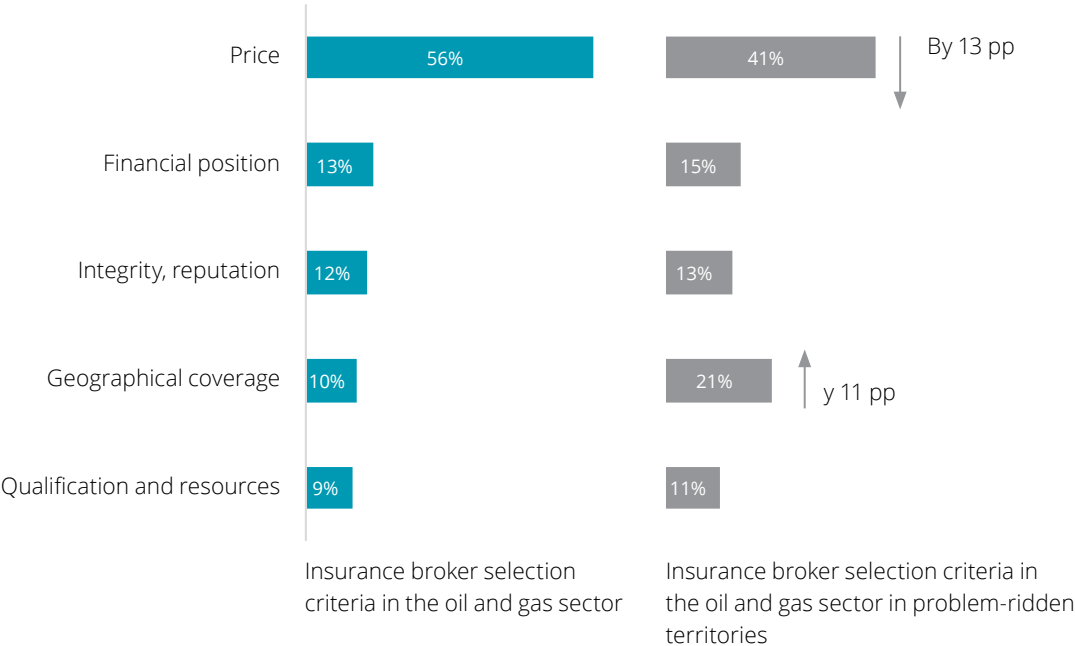
Criterion	Indicator	Assessment method	Max. score	Min. score	Weight of the criterion
Qualifications and resources	Experience buying coverage for energy clients (energy companies)	Desk research	3	0	11%
		Broker's presentation			
		Interview with insurance broker managers			
		Request of references from previous clients			
	Broker's years in business	Desk research	2	0	
	Experience of loss adjustment in the oil and gas industry	Desk research – security check through systems (Kronus, ...)	2	0	
	Availability of skilled oil and gas insurance specialists (professional standard "Insurance broker, specialty "Engineer")	Upon personal request of information from the broker	2	0	
	The broker holds insurance policy from an insurer with a high reliability rating	Desk research	2	0	
		Request of licenses from the broker			
	Key strengths of the broker	Desk research	2	0	
		Broker's presentation			
		Interview with insurance broker managers			
	Competitors served by the same broker	Desk research	1	0	
		Broker's presentation			
		Interview with insurance broker managers			
Flexibility and ability to meet the strategic needs of the oil and gas company, including the ability to serve the company worldwide	Personal communication with the broker	2	-2		
Understanding the specific nature of the oil and gas company and its risks	Analysis of proposal	5	-5		
Proposed insurance programme structure	Analysis of proposal	7	0		
Additional services for the oil and gas company (risk and claim management)	Analysis of proposal	1	0		
Roles and responsibilities of the key participants of the broker's proposed client team	Personal communication with the broker team	1	0		
International team coordination and the structure of the acquired international coverage	Personal communication with the broker	3	0		

Criterion	Indicator	Assessment method	Max. score	Min. score	Weight of the criterion
Integrity, reputation	Level of risk according to the due care index on the basis of SPARK-Interfax data	SPARK-Interfax	3	-3	10%
	Licensing	Desk research	1	0	
		Request of licenses from the broker			
	Good broker history	Desk research – security check through systems (Kronus, ...)	3	-3	
		Request of references from previous clients			
Commercial court practice	Check through security systems	3	-3		
Geographical coverage	Presence in each of the geographical markets where the oil and gas company operates	Desk research	5	0	21%
		Broker's presentation			
		Interview with insurance broker managers			
Financial position	Profit of the company	Financial statements	5	-5	15%
	Statistics on tax arrears not higher than 1% of balance sheet totals	Financial statements	3	-3	
		Statements from the accounting department (upon request to the broker)			
	Credit history (creditworthiness index)	Check through security systems	3	-3	
	Financial stability ratio (Capital + long-term liabilities)/liabilities	Financial statements of the broker company	4	-4	
		Financial statements of the broker company			
Leverage ratio (Capital/liabilities)	Financial statements of the broker company	3	0		
Current liquidity ratio ((current assets - long-term liabilities - VAT paid)/current liabilities)	Financial statements of the broker company	3	0		
Price	Proposed remuneration structure, including the principles of calculation and level of compensation	Analysis of proposal	8	0	43%
	Structure of compensation for additional services, such as claim management and its internal distribution	Analysis of proposal	8	0	
	Contract price	Analysis of proposal	15	0	



Figure 7 illustrates how the rating of insurance broker criteria changes for refinery businesses in problem-ridden geographical zones.

Figure 7. Broker selection criteria rated by importance (by geography).

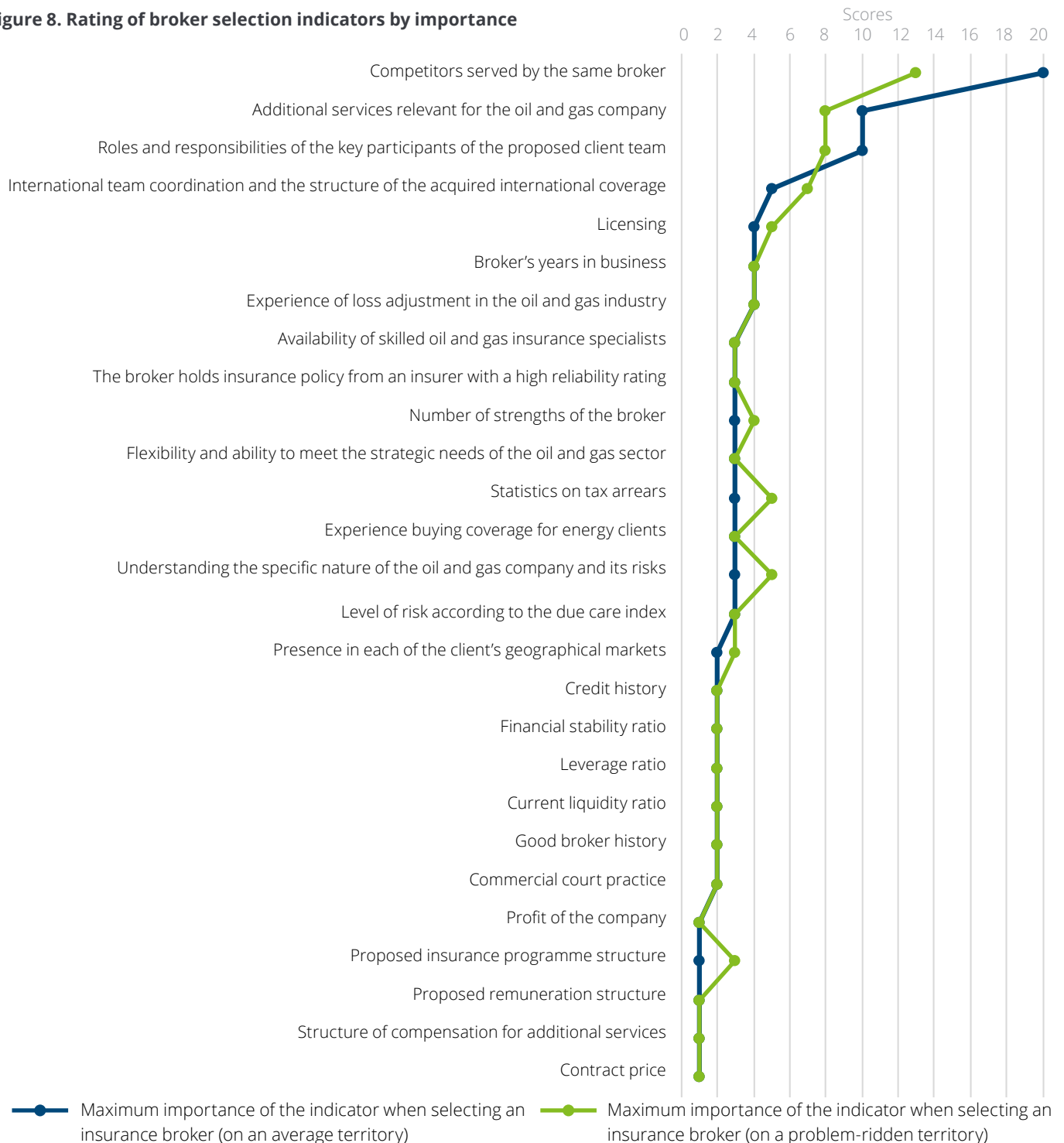


The above ratings do not show one important aspect: change in importance at the level of indicators. Figure 8 reveals the growth in importance of such indicators as:

- International team coordination and the structure of the acquired international coverage;
- Understanding the specific nature of the oil and gas company and its risks;

- Presence in each of the client’s geographical markets;
- Proposed insurance programme structure. The identified trends support conclusions made earlier about the response of oil and gas companies to increased risk concentration.

Figure 8. Rating of broker selection indicators by importance



Trends

- Brokers is the key insurance selling channel in industrially developed nations.
- In terms of selecting an insurance broker, each company has its own preferences, paying special attention to the contract price. At the same time, companies (both Russian and international) want to be sure that the broker:
 - Understands their business;
 - Is able to represent their interests when dealing with the insurers;
 - Holds an insurance policy;
 - Will provide assistance with making an insurance claim for an agreed-upon consideration.
- An analysis of international practices of insurance broker selection has revealed that intangible assets of the insurance broker are of higher importance for foreign companies::
 - The company's market reputation;
 - Quality of the customer base;
 - Customer loyalty;
 - Customer base growth rate;
 - Membership of the insurance broker in professional associations and its expert position in the market.
- The largest international businesses are more concerned about weighted average data on the insurance broker's financial performance.
- For deeper assessment of the intangible element, foreign companies have introduced screening methods of broker evaluation. It is more effective to perform the screening before gathering official tender documentation.
- Today, oil and gas sector development more often involves the establishment of production facilities on problem-ridden territories (such as the Arctic).
- High synergy and concentration of various risks are common to refineries in problem-ridden territories; however, the burden is growing more from environmental and political risks.
- Total direct damage from accidents for the period from 2011 to 2016 (only the data on large accidents higher than USD 5 million is included) at Russian refineries is estimated at more than USD 1.5 billion .
- The total amount of known losses associated with environmental risks in the world for the period from 2009 to 2014 is EUR 461,616,307.
- The most dangerous group, in terms of environmental risk, includes pipelines, chemical, mining, primary metal and steel facilities.
- Today, the issue of introducing mandatory environmental insurance, despite the high prominence of environmental risks and their effects on the agenda of leading industrial companies in Russia, is actively debated between insurers and the Russian Ministry of Natural Resources and Environment.
- Typical considerations when selecting an insurance broker for a refinery in a problem-ridden territory will include:
 - Contract price less important (by 13 pp);
 - Geographical coverage criterion more important (by 11 pp);
 - Financial position and integrity criterion more important (by 2 pp);
 - It becomes more important that the broker understands the specific nature of the oil and gas companies with production facilities located in problem-ridden geographical areas, and that the insurance programme structure differs from the general provisions, taking into account special geography and synergy of risks (increase by 2 out of 10 possible scores);
 - Increased importance of reinsurance;
 - Increased importance of assessments resulting from independent screening surveys.

Validation

In September 2016, Deloitte CIS completed a desk research dedicated to global insurance broking in the oil and gas industry. Information was sourced from leading official resources (both Russian and international) and expert discussions with insurance broking market participants, as well as independent representatives of insurance and risk management practices in the oil and gas sector (members of professional insurance associations, representatives of leading international consultancies, and largest Russian corporations that use insurance broking services).

Key research findings were validated by conducting expert interviews and comparative analysis of similar studies. Thus, experts share the opinion that there are very few studies that focus on the insurance broking market, especially in the oil and gas sector. The last official review of the Russian insurance broking market was published in 2008 (based on 2007 data) by Expert RA Rating Agency. In addition, the insurance broking market (both in Russia and abroad) is in the state of flux (i.e., there are constant changes in the definitions of basic concepts, legislation, etc.), which in turn affects the activity of insurance brokers, insurers and the structure of business relations in the overall industry. This confirms that the subject of this paper is topical, practically relevant and useful. Following the report's validation, the following sections were modified:

- Diagram of the process of entering into a risk insurance contract

- Addition in the chain of relations with the reinsurer
- Risk management in the oil and gas industry
- Creation of a risk map for oil and gas sector companies
- Advantages of engaging insurance brokers in the oil and gas industry
- Focus on providing a wide range of risk management services and related advice as well as broking services
- While validating the report, we also received the following comments:
 - As the average brokerage fee data was sourced from publically available information on tenders, it is important to note that there may be undisclosed/non-public information about the services provided. Such information is likely to raise the estimated average brokerage fee (in particular, for international data);
 - The report focuses on the advantages of working with insurance brokers for large resource and industrial companies, while less attention is paid to the disadvantages of such relationships in the market. However, this bias results from the general objective of the research – to examine the practices in the insurance broking services market to improve the effectiveness of such relationships;
 - Research results are extremely useful because they helped to identify major differences between Russia and other countries when it comes to the insurance broker selection processes.

As it turns out, foreign companies pay more attention to intangible assets of a business, which has been historically proven by the origins of the concept of “goodwill” and its evolution in the global economy;

- The insurance broker selection criteria matrix reflects the actual practice and may be used when drawing up terms of reference for service providers;
- The conclusions made will be relevant for at least one year. In subsequent years [in the absence of material geopolitical and economic developments that will materially affect the overall state of the Russian and global economy], this report may be updated by adding new data for key quantitative indicators. Moreover, experts recommend that the qualitative data block (data received from in-depth, expert interviews) be updated at least twice a year.
- It is not obligatory, but rather recommended that practical cases from representatives of large corporations about how businesses work with insurance brokers and what results they get is added. Such addition will improve the research quality, but make the report strictly confidential.

To summarise, the completed research project (desk research) was validated across all relevant criteria: it is topical, accurate, adequate (comprehensive content), flexible for updates, and practical.



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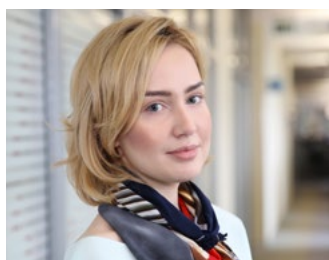
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