MINISTRY FOR DEVELOPMENT OF INFORMATION TECHNOLOGIES AND COMMUNICATIONS OF THE REPUBLIC OF UZBEKISTAN

TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES

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"THE MANAGEMENT OF ECONOMIC RISKS IN THE INSURANCE SPHERE ON THE EXAMPLE OF THE INSURANCE COMPANY "ALSKOM""

5A350301 – Economics and management in the sphere of Information Communication Technologies

D I S S E R T A T I O N

for the academic degree of Master

Research Supervisor:

Ph.D. in Economics, docent N.A. Iminova

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Period of Study: 2013-2015	**Specialty: 5A350301 Economics and Management in the sphere of ICT**

ANNOTATION OF MASTER'S DISSERTATION

Importance of the topic. It is obvious that, nowadays in the sphere of economy and business, the types of risks and losses, which have appeared in the result of those risks, have changed significantly in comparison with the previous centuries. There are a great deal of factors making such circumstances, for instance, the continuous development of different types of technologies such as information or communication technologies, the need for their continuous modernizations, to prepare the special staff or professionals for keeping the balance between the role of human and technology and etc. Basically, the present work discusses the role economic risks in the sphere of insurance system. Because, in our days, insurance becomes one of the most popular methods, which provides the policyholder with the finance in case of occurring the circumstances recognized as risk. Considering that, the financial providing is an essential feature of any transaction or business in the sphere of economics and therefore I assumed that, the discussion of this issue from the insurance perspectives would enable us to find out the useful methods or techniques for managing the economic risks in the sphere of insurance. In detail, by considering that the security of information is the basic notion of economic risks, the present dissertation is more directed to examine the role of insurance in the securing the information.

Objectives. Generally, the present research is dedicated to analyze the following issues:

1. An importance of insurance market and the reasons for its existence;
2. Information risks and the reasons for their appearancein economic risks management;
3. Insurance as the method of providing economic risks information security;
4. The strategy of «ALSKOM» Insurance Company in relation to information security;
5. The effective types and procedures of insurance for providing economic risks information security;
6. Coaching the staff in the sphere of information security insurancein economic risks management.

From my point of view, in order to imagine an operation system of any sphere, one should firstly examine the components of that sphere. Therefore, in the present work I am going to analyze an importance of insurance market and the reasons for its existence. In this case, there will be discussed how insurance market was created and what the purposes were for its creation. Thereby the work slightly moves to notion of information risks and the reasons for their appearance. The discussion of these two issues will allow to combine them and to understand how they related to each other. As it was mentioned above, the discussion leads to the notion that, insurance as the method of providing information security in economic risks management. In the research arena of the work, appears «ALSKOM» Insurance Company the only company in Uzbekistanwhich is engaged in insurance against information risks. An examination of company's activity shows the effective types and procedures of insurance for providing information security. Thereby, one can find out the advantages and disadvantages of that activity and in its queue, an examination will show in what areas employer or organization should coach the staff in order to prevent disadvantages and further development of activity in the sphere of information security insurance in economic risks management. Those are the main objectives of the present dissertation.

Object and subject-matter. An object of the present research is the «ALSKOM» Insurance Company. The procedures and activities operating in the sphere of management and insurance of economic risks are the subject-matter of the research.

Methodology. As for the methods, in order to analyze some problems in the sphere of economic-information risk insurance and its management in Uzbekistan, there will be used some specific techniques, such as logical assumptions and predictions, usage of different ideas and hypothesis, examination of the current structure of insurance and thereby shifting from nonfigurative data to more figurative information. The factors for using these methods are observable because due to such ways there will be formulated the main issues in the aspect of management economic risks in the insurance sphere. Furthermore, mixing ideas gives possibility to grasp the current situation in relation to insurance the information against the particular risks.

The main part of the project's structure based on the conducted interviews with the employees who work in job position related to regulating the insurance system, lawyers and staff of the «ALSKOM» Insurance Company. The interviews mostly directed to discuss the issues related to liabilities of employees and employers, for example:

- The role of an insurer in providing information security in economic risks management;
- Objectives of insurance against information risks in economic risks management;
- Costs or tariffs of insurance policy of information risks in economic risks management;
- Amount of payment in case of information losses in economic risks management and etc.

Thereby the survey method became most effective for identifying the real problems and particularly solutions to the problems, because apparently that there can be a good deal of alternative solutions to protection of information.

The level of novation. The President of Republic of Uzbekistan Islam Karimov has strongly mentioned that: «XXI century - the century of information technology. Our children are interested in modern information technology, the field of communication»[1]. By considering this article we can imagine the great role of information communication technologies in our today's life. However, information is creating and regulating by human in order to make our life easier and be informed about important events, if so, there is the great necessity for protecting the information. In order to achieve these aims, there were created the different policies and strategies such as, economic risks, their management, methods for providing information security and etc. This work is dedicated to study these policies and strategies, because today, the economic risks management, information and its security are the global and essential issue for the world.

Practical essence and the realization of research results. In accordance with the statements mentioned above, one can find out an importance of the topic in our life and in the governmental activities. Besides, today the Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan directs its forces to protect the information related to both areas personal and governmental. Therefore, I do believe that the achieved results of this project can be used in a lot of governmental and non-governmental organizations, for example the Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan or «ALSKOM» Insurance Company and other organizations.

Structure and composition. The structure of the dissertation consists of introduction, three parts, the bibliography and appendixes. Totally the dissertation work consists of 84 pages.

The main achieved results. In the present dissertation, there were analyzed and described the system of economic risks management, insurance system in Uzbekistan and in foreign countries, an activity of «ALSKOM» Insurance Co. especially related to information risks insurance the perspectives and advantages as

[1] «President visited Fergana region», governmental portal of the Republic of Uzbekistan, 17 October 2009 (Updated 2014), Date of access: 14 September 2014. E-source: «http://www.gov.uz/ru/press/politics/3112»

well as the effective ways to insurance the information in the sphere of information communication technologies.

The short total expression of conclusion and recommendations. Dissertation evidences that, today the information is very important sphere and in any way it should be secured and in this case, insurance is one of the useful methods for providing information security. This strongly states that, insurance provides information with the security before an occurrence of particular insured event. In other words, when an organization decides to insure its information against particular risks, this organization will face with the application-form provided by Insurer. This application-form should be provided with the full information about the conditions of organization's information security and if the level of information security in organization is low, logically the premium of insurance would be expensive proportionally with the low level of information security, thereby organization will try to increase the level of information security which allows to decrease amount of insurance premium. Moreover, despite the fact that in the Republic of Uzbekistan only «ALSKOM» Insurance Co. serves information risks insurance, by the governmental organizations of Uzbekistan was implemented executive and legal documents in order to regulate information risks insurance transactionsin economic risks management. However, by considering the fact that information risks insurance is the new and modern direction, we cannot say that it operates satisfactorily. Therefore, the main objective of the present work is to develop the information risks insurance in order to make economic risk management in Uzbekistan more stable.

Supervisor:

Master's degree student:

ЎЗБЕКИСТОН РЕСПУБЛИКАСИ АХБОРОТ ТЕХНОЛОГИЯЛАРИ ВА КОММУНИКАЦИЯЛАРИНИ РИВОЖЛАНТИРИШ ВАЗИРЛИГИ

ТОШКЕНТ АХБОРОТ ТЕХНОЛОГИЯЛАРИ УНИВЕРСИТЕТИ

Факультет: АКТ соҳасида иқтисодиёт ва менежмент

Кафедра: Менежмент ва маркетинг

Ўқув йили**:**2013-2015

Магистратура талабаси: А.Б.Сатторов

Илмий раҳбар: и.ф.н., доц. Н.А.Иминова

Мутахассислиги: : 5А350301 – Ахборот-коммуникация технологиялари соҳасида иқтисодиёт ва менежмент

МАГИСТРЛИК ДИССЕРТАЦИЯСИ АННОТАЦИЯСИ

Мавзунинг долзарблиги:Барчамизга маълумки, бугунги кунда иқтисодиёт ва бизнес соҳаларидаги рисклар оҳирги йиллар кўрсаткичларига нисбатан аҳамиятли даражада жадал суръатлар билан ортиб бормоқда. Бундай ҳолатлар юзага келишига жуда кўп сабаблар мавжуд бўлиб, хусусан ахборот ва коммуникация соҳасининг тўхтовсиз равишда ривожланиши, мазкур соҳани тўхтовсиз равишда модернизация қилинишига эҳтиёжнинг тобора ортиб бориши, инсон фактори ва технология ўртасидаги мувозанатни сақлаш мақсадида соҳа вакиллари бўлмиш кадрлар малакасини доимий равишда ошириб бориш кабилардир. Мазкур иш асосан юқорида келтирилган рискларни суғурта соҳасида бошқаруви тартибини ёритишга бағишланган, негаки, бугунги кунда суғурта, суғурта ҳодисаси юз берган тақдирда суғурталанувчини иқтисодий тарафлама маблағлантиришнинг энг оммабоп усулларидан бири сифатида қўлланиб келинмоқда. Ҳар қандай транзакцияларда ёки тадбиркорлик соҳаларида иқтисодий таъминот энг муҳим ўрин тутишини ҳисобга олган ҳолда, суғурта фаолиятининг истиқболларини таҳлил қилиш, ўрганиш ва амалиётда қўллаш бугунги кунда долзарб аҳамият касб этади. Шунингдек, мазкур таҳлил бизни, иқтисодий рискларни суғурталаш ва бошқариш йўналишларидаги энг илғор услублар билан таништиради. Иқтисодий рисклар туркумига бугунги кунда ахборот рисклари кириб келиб, ахборот рискларини бошқариш иқтисодиётнинг ўзаги сифатида ҳам қатнашади. Демак, мазкур ишда ахборот рискларини суғурта қилиш йўли билан ахборот хавфсизлиги ва иқтисодий рискларнинг самарали бошқарувига эришиш йўллари таҳлил қилинади.

Ишнинг мақсади ва вазифалари: Мамлакатимизда Ахборот коммуникация технологиялари (АКТ)нинг жадал ривожланиши шароитида суғурта компанияларида иқтисодий рискларни бошқариш ва ахборотларни суғурталаш йўлларини атрофлича тахлил қилиш асосида ушбу йўналишни такомиллаштириш ва самарали йўлларини ишлаб чиқишга оид таклиф ва тавсиялар ишлаб чиқишдан иборат.

Қўйилган мақсаддан келиб чиққан ҳолда тадқиқот ишида қуйидаги вазифалар белгиланди ва ҳал этилди:

1. Иқтисодий рискларни бошқаришда суғурта бозори ва унинг моҳиятини ёритиб бериш;

2. Иқтисодий рискларни бошқаришда ахборот рисклари ва унинг пайдо булиши хусусиятларини очиб бериш;

3.Иқтисодий рискларни ҳимоялашда ахборот рискларини суғурталаш йўлларини ёритиб бериш;

4. «ALSKOM» Суғурта компаниясининг ахборот хавфсизлигини таъминлаш бўйича стратегияси;

5. Суғурта компанияларида ахборот рискларини суғурталашнинг самарали йулларини ишлаб чиқиш;

6. Иқтисодий рискларни суғурталашда кадрлар малакасини оширишнинг истиқболли йўлларини асослаб бериш.

Сир эмаски, ҳар қандай соҳанинг ишлаш тизими ҳақида тўлиқ тасаввурга эга бўлиш учун, аввалам бор ўша соҳанинг компонентлари билан танишиб чиқиш лозим. Шу сабаб, соҳанинг асосий компоненти сифатида суғурта бозорининг моҳияти ва унинг ишлаш принциплари мазкур ишда ёритилади. Бунинг учун, суғурта бозори қандай пайдо бўлган ва унинг яратилиш мақсадлари муҳокама қилинади. Шундай аснода диссертация ишида суғурта бозоридаги рисклар ва уларнинг бошқарув тизимларига секинлик урғу берилади. Юқорида таъкидланганидек, ушбу таҳлил иқтисодий рискларнинг негизи бўлмиш, ахборот рискларининг бошқаруви суғурта фаолияти билан қандай боғлиқлик касб этишини ёритиб беради. Таҳлил ва ўрганиш ареналарида Ўзбекистон Республикасида ахборот рискларини суғурта қилувчи "ALSKOM" Суғурта компанияси майдонга чиқади. Компания фаолиятини таҳлил қилиш эса, ўз навбатида ахборот рискларини суғурта қилишда қўлланиладиган самарали услублар билан танишишга имкон беради. Ахборот ҳавфсизлигини таъминлашда кадрлар малакасини доимий равишда ошириб бориш масалалари, маълум бир ташкилотнинг фаолиятини ўрганган ҳолда амалга оширилади. Диссертация мавзусининг долзарблик томонлари кўрсатиб ўтилган масалалардан таркиб топган.

Тадқиқот объекти ва предмети:"ALSKOM" Суғурта компанияси тадқиқотнинг объекти сифатида ўрганилади. Тадқиқот предметлари эса, иқтисодийахборот рискларининг бошқаруви ва суғуртасига оид фаолият, тартиб ва принциплар ишнинг асосий предметлари қаторига киради.

Тадқиқот услубияти ва услублари: Тадқиқот услубияти асосан махсус методлардан ташкил топган бўлиб, булар ичига, мантиқий ёндашув, муайян маълумотлар асосида олдиндан фикрни изоҳ қилиш, гипотиза ва фикрларни таҳлил қилиш, суғуртанинг муайян тизимини таҳлил қилиш асосида маълумотларни абстракт ҳолатдан аниқ ҳолатга айлантиришдир. Бундан ташқари, лойиҳанинг асосий маълумотлари ахборот рискларини суғурта қилишга оид фаолият ичида иш юритувчи ходимлар билан ўтказиб борилган суҳбатлар асосида йиғилган ва таҳлил қилинган.

Тадқиқот натижаларининг илмий жиҳатдан янгилик даражаси қуйидагилардан иборат, иқтисодий рискларни бошқаришда суғурта бозори ва унинг моҳиятини ёритиб берилган, иқтисодий рискларни бошқаришда ахборот рисклари ва унинг пайдо бўлиши хусусиятлариасослаб берилган,иқтисодий рискларни ҳимоялашда ахборот рискларини суғурталаш йўлларини ёритиб берилган, «ALSKOM» СКнинг ахборот хавфсизлигини таъминлаш бўйича стратегияси тахлил қилинган, суғурта компанияларида ахборот рискларини суғурталашнинг самарали йўллари таклиф этилган, иқтисодий рискларни суғурталашда кадрлар малакасини оширишнинг истиқболли йўлларига оид тавсиялар ишлаб чиқилган.

Тадқиқот натижаларининг амалий аҳамияти ва татбиқи: Юқоридагилардан келиб чиққан ҳолда, таъкидлаш жоизки, мавзунинг долзарблиги нафақат инсон, балки жамият ва давлат фаолиятида ҳам аҳамият касб этади. Ўзбекистон Республикаси Ахборот технологиялари ва коммуникацияларини ривожлантириш вазирлигининг асосий йўналиш ва функцияларидан бири бўлиб, ахборотни шахсий ва давлат даражасида ҳимоялаш ҳисобланади. Шу сабабли, тадқиқотдан келиб чиққан ижобий натижалар, давлат бошқаруви органлари ва хўжалик юритувчи хусусий корхона ташкилотларда ахборот хавфсизлигини таъминлаш, ахборот рискларини бошқариш борасида самарали услублар яратилишига кенг кўмак беради.

Ишнинг тузилиши ва таркиби: Диссертация кириш сўзи, уч боб, хулоса, адабиётлар рўйҳати ва иловалардан ташкил топган. Диссертация ишининг умумий хажми 84 бетдан иборат.

Бажарилган ишнинг асосий натижалари: Мазкур ишда иқтисодий рисклар бошқаруви тизими, Ўзбекистон Республикаси ва чет эл мамлакатларининг суғурта тизимлари, “ALSKOM” СКсининг иқтисодий рискларни бошқаришда ахборот рискларини суғурта қилиш турига оид фаолияти ҳамда АКТ соҳасида иқтисодий рискларни камайтиришда ахборот рискларини суғурта қилишнинг самарали услуб ва воситалари ёритиб берилган ва таҳлил қилинган.

Хулоса ва таклифларнинг қисқача умумлаштирилган ифодаси: Мазкур тадқиқот, суғурта компанияларида иқтисодий рискларни бошқаришда ахборот хавфсизлигинининг бугунги кунда муҳимлиги ва ҳар қандай ҳолларда унинг хавфсизлигини таъминлаш зарурлигини, ҳамда ушбу масалада молиявий зарбаларни юмшатувчи элемент сифатида суғурта энг самарали усуллардан бири эканлигига гувох бўлдик. Қатъий таъкидлаш жоизки, иқтисодий рискларни бошқаришда суғурта маълум ходиса юз бериш (ҳужум, ўғирланиш ва ҳ.к.)дан олдин ҳимоялаш услубидир. Бошқа сўзлар билан ифодалайдиган бўлсак, ташкилотда ахборотларнинг йўқотилиши натижасида ташкилот жуда катта йўқотишларга учраши мумкин, бу эса ўз навбатида иқтисодий йўқотишларга олиб келиши муқаррар. Ташкилот ўз маълумотлар базасини маълум бир рискларга қарши суғурта қилишга қарор қилганда, мазкур ташкилот суғуртачи томонидан тақдим этилган ҳужжатлар билан танишиб чиқиб, мазкур ҳужжатларда ташкилотнинг ўз ахборотларини ҳимоялаш даражаси акс эттирилади ва ташкилотнинг ҳимоя даражаси паст бўлган тақдирда, суғурта мукофоти суммаси ортиб боради, негаки паст ҳимояланган ахборот базасининг йўқолиш ва деструктив бўлиши эҳтимоллиги жуда юқори бўлади. Қимматга эришилган суғурта полиси эса ўз навбатида ташкилотга ортиқча ҳаражат сифатида рол ўйнайди. Жараёнга бошқа тарафдан ёндашадиган бўлсак, ташкилот ўз маълумотлар базасини юқори даражада ҳимоялаши, суғурта мукофотини арзонлаштириш билан бир қаторда, энг муҳими, ташкилотнинг ахборот хавфсизлигини янада кучайтиради. Ушбу вазифаларни амалга оширишда суғурта компанияларида иқтисодий рискларни бошқариш ва камайтириш йўлларидан бири сифатида ахборот хавфсизлигини таъминлаш орқали иқтисодий рискларни мувозанатлаштиришга эришиш диссертация ишининг асосий мақсадларидан биридир.

Илмий раҳбар ________________________

(имзо)

Магистратура талабаси ________________________

(имзо)

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INTRODUCTION

Today, life itself presents us with the task of strengthening the role and place of Mass media in civil institutions[2]!

I.A. Karimov

The justification and importance of the topic of dissertation. As we know, the president of the Republic of Uzbekistan in his final report strongly mentioned that by the end of 2014 the volume of rendered services market grew by 15.7 percent, while their share in GDP increased from 53 percent to 54 percent. In this area, currently employing over 50 percent employees and in this area for more than a third of a year of new jobs created, especially for young professionals graduating from vocational colleges. The increasing popularity among the population are modern high-tech services, such as mobile phone services, high speed Internet, TV cable connection, remote banking services, maintenance and repair agricultural and automotive engineering, process equipment. Over the past five years, the share of traditional types of household and communal services has decreased from 16 to 9.5 percent, while the share of high-tech services increased to 21.2 percent. Among the high-tech services most intensively in recent years, developing communication and information services, which in the past five years has increased by 3.3 times, and for the year 2014 by 24.5 percent. Aware of the special and important role of ICT in the economy and society, in 2013 adopted a comprehensive program for the development of national information and communication system of the Republic of Uzbekistan for the period 2013 to 2020. Due to the projects implemented by this program, in 2014 all republic ATS[3] are transferred from analogue to digital signal, which is significantly increased the rate of use of international information networks. Particular attention is paid to increase the availability of ICT services for the population, including those living in remote regions of the country. For

[2] I.A. Karimov, Jahon inqirozining oqibatlarini yengish, mamlakatimizni modernizatsiya qilish va taraqqiy topgan davlatlar darajasiga ko'tarilish sari (Uzbekistan 2010) 86. Available on: «www.ziyouz.com»

3 ATS – Automatic Telephone Station

example, in 2014 in the country built more than 2 thousand kilometers of fiber-optic communication lines, including such remote areas as Kungrad, Baisun, Uzun, Muinak.

Furthermore, each year in the country growing the number of Internet users, which now constitutes more than 10.2 million people, in other words one-third of the total population. In this case, the bandwidth of the Internet in the country increased to 4 times, and access speed to 1.5 times. In addition, the cost of the Internet compared to the previous year decreased by 11.6 percent[4].

In this modern day and age, information technology plays a big role. However, if you are not in the field of information technology yourself, you might not know just how information technology touches your life. For example, in business area, it is not a secret that, with the introduction of computers, the business world has been changed forever. Using computers and software, businesses use information technology to ensure that their departments run smoothly. Business people use the information technology in a number of different departments including human resources, finance, manufacturing, and security. Moreover, by using information technology, businesses have the ability to view changes in the global markets far faster than they usually do. They purchase software packages and hardware that help them get their job done. The largest businesses have even their own information technology department designed to upkeep the software and hardware. Information technology has allowed businesses to keep up with the supply and demand as consumers grow more anxious to have their items instantly. Using information technology, businesses like Amazon are working to help busy consumers do their grocery shopping. Just a few clicks on a website allow the consumer to submit an order, and information technology sends that order to the company[5]. As we know apart

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[4] Report of the President of Uzbekistan Islam Karimov at the meeting of the Cabinet of Ministers dedicated to the socio-economic development in 2014 and the most important priorities of economic program for 2015. Narodnoe Slovo 17 January 2015 № 11 (6164) 2-3. Also available on: www.narodnoeslovo.uz

[5] Natasha Quinonez «The importance of Information Technology and its Disadvantages» 23 May 2014 (updated 2014), Udemy/Blog 2014, Date of access: 14 September 2014, E-source: «https://www.udemy.com/blog/importance-of-information-technology/»

from business, Information is essential part of education, finance, healthcare, security and so on. In general words, it means information communication technology surrounds our life and we cannot imagine our activities without it.

By analyzing above mentioned, one can find out that information communication technologies is the part of economic which plays the great role in human activity. Therefore, any risk related to economic or information should be managed and secured. Basically, the present work is dedicated to describe the risk management in economics and one of the methods for securing the information called insurance.

Object and subject-matter. An object of the present research is the «ALSKOM» Insurance Company. The procedures and activities operating in the sphere of management and insurance of information risks in economic risks management are the subject-matter of the research.

Objectives. Generally, the present research is dedicated to analyze the following issues:

1. An importance of insurance market and the reasons for its existence;
2. Information risks and the reasons for their appearance in economic risks management;
3. Insurance as the method of providing economic risks information security;
4. The strategy of « ALSKOM» Insurance Company in relation to information security;
5. The effective types and procedures of insurance for providing economic risks information security;
6. Coaching the staff in the sphere of information security insurance in economic risks management.

From my point of view, in order to imagine an operation system of any sphere, one should firstly examine the components of that sphere. Therefore, in the present work I am going to analyze an importance of insurance market and the reasons for its existence. In this case, there will be discussed how insurance market was created and what the purposes were for its creation. Thereby the work slightly moves to notion of information risks and the reasons for their appearance. The discussion of these two issues will allow to combine them and to understand how they related to each other. As it was mentioned above, the discussion leads to the notion that, insurance as the method of providing information security in economic risks management. In the research arena of the work, appears « ALSKOM» Insurance Company, the only company in Uzbekistan which is engaged in insurance against information risks. An examination of company's activity shows the effective types and procedures of insurance for providing information security. Thereby, one can find out the advantages and disadvantages of that activity and in its queue, an examination will show in what areas employer or organization should coach the staff in order to prevent disadvantages and further development of activity in the sphere of information security insurance. Those are the main objectives of the present dissertation.

Literature Review. The present topic was discussed by a great deal of scientists and authors, besides the novels of the President of the Republic of Uzbekistan would be the main theoretical and methodical base for the present work. The topic was discussed by some professors such as Iminov T.K., Aripov A.N., and foreign professors such as, Natasha Quinonez, Cathy Pareto, Sir Gus O'Donnell, Jack A. Jones, Andrey Golov, D.G. Dyankov and also related employees of ICT sphere and insurance companies.

Methodology. As for the methods, in order to analyze some problems in the sphere of information risk insurance in economic risks management and its management in Uzbekistan, there will be used some specific techniques, such as logical assumptions and predictions, usage of different ideas and hypothesis, examination of the current structure of insurance and thereby shifting from nonfigurative data to more figurative information. The factors for using these methods are observable because due to such ways, there will be formulated the main issues in the aspect of management economic risks in the insurance sphere.

Furthermore, mixing ideas gives possibility to grasp the current situation in relation to insurance the information against the particular risks.

The main part of the project's structure based on the conducted interviews with the employees who work in job position related to regulating the insurance system, lawyers and staff of the «ALSKOM» Insurance Company. The interviews mostly directed to discuss the issues related to liabilities of employees and employers, for example:

- The role of an insurer in providing information security in economic risks management;
- Objectives of insurance against information risks in economic risks management;
- Costs or tariffs of insurance policy of information risks in economic risks management;
- Amount of payment in case of information losses in economic risks management and etc.

Thereby the survey method became most effective for identifying the real problems and particularly solutions to the problems, because apparently that there can be a lot of alternative solutions to the protection of information.

The level of novation. The President of Republic of Uzbekistan Islam Karimov has strongly mentioned that: «XXI century - the century of information technology. Our children are interested in modern information technology, the field of communication»[6]. By considering this article we can imagine the great role of information communication technologies in our today's life. However, information is creating and regulating by human in order to make our life easier and be informed about important events, if so, there is the great necessity for protecting the information. In order to achieve these aims, there were created the different policies and strategies such as, economic risks, their management, methods for providing information security and etc. This work is dedicated to

[6] «President visited Fergana region», governmental portal of the Republic of Uzbekistan, 17 October 2009 (Updated 2014), Date of access: 14 September 2014. E-source: «http://www.gov.uz/ru/press/politics/3112»

study these policies and strategies, because today, the information and its security are the global and essential issue for the world.

Practical essence and the realization of research results. In accordance with the statements mentioned above, one can find out an importance of the topic in our life and in the governmental activities. Besides, today the Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan directs its forces to protect the information related to both areas personal and governmental. Therefore, I do believe that the achieved results of this project can be used in a lot of governmental and non-governmental organizations, for example, the Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan or «ALSKOM» Insurance Company and other organizations.

Structure and composition. The structure of the dissertation consists of introduction, three parts including their conclusions, the bibliography and appendixes. Totally it consists of 84 pages.

The main achieved results. In the present dissertation, there were analyzed and described the system of economic risks management, insurance system in Uzbekistan and in foreign countries, an activity of «ALSKOM» Insurance Co. especially related to information risks insurance the perspectives and advantages as well as the effective ways to insurance the information in the sphere of information communication technologies.

The short total expression of conclusion and recommendations. Dissertation evidences that, today the information is very important sphere and in any way it should be secured and in this case, insurance is one of the useful methods for providing information security in economic risks management. This strongly states that, insurance provides information with the security before an occurrence of particular insured event. In other words, when an organization decides to insure its information against particular risks, this organization will faced with the application-form provided by Insurer. This application-form should be provided with the full information about the conditions of organization's information security and if the level of information security in organization is low, logically the premium of insurance would be expensive proportionally with the low level of information security, thereby organization will try to increase the level of information security which allows to decrease amount of insurance premium. Moreover, despite the fact that in the Republic of Uzbekistan only «ALSKOM» Insurance Co. serves information risks insurance in economic risks management, by the governmental organizations of Uzbekistan was implemented executive and legal documents in order to regulate information risks insurance transactions. However, by considering the fact that information risks insurance is the new and modern direction, we cannot say that it operates satisfactorily. Therefore, the main objective of the present work is to develop the information risks insurance in order to make economic risk management in Uzbekistan more stable.

Part I. THE FEATURES AND THEORETICAL ASPECTS OF INSURANCE IN ECONOMIC RISKS MANAGEMENT

1. An importance of insurance market and the reasons for its existence

Insurance is a form of risk management in which the policyholder transfers the cost of potential loss to another entity in exchange for monetary compensation known as the premium. Insurance allows individuals, businesses and other entities to protect themselves against significant potential losses and financial hardship at a reasonably affordable rate. Insurance is appropriate when a person wants to protect against a significant monetary loss. For example, life insurance – if a person is the primary breadwinner in his/her home, the loss of income that his/her family would experience as a result of our premature death is considered a significant loss and hardship that a person should protect them against. It would be very difficult for one's family to replace his/her income, so the monthly premiums ensure that if a person dies, his/her income will be replaced by the insured amount. If the potential loss will have a detrimental effect on the person or entity, insurance makes sense[7].

In short, there is a such definition of insurance – protection against loss for which a person pays a certain sum periodically in exchange for a guarantee that he/she will be compensated under stipulated conditions for any specified loss by fire, accident, death and etc. Therefore, there was a need for creation of insurance market. Apparently, in starting and running any type of business that has the particular risks. Recognizing the risks in all areas of a person's business-management, marketing, contracts, personnel and the particular ramifications of his/her product or service on customers and the market and it is the first step in effective risk management. Concretely, those are considered as the important information of owner of business. Therefore, one of the smartest moves any business owner can make is having enough of the right kinds of insurance. Thereby, there was created the type of insurance which covers the information

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[7] Cathy Pareto «Intro to Insurance: What Is Insurance?», Investopedia LLC. 2014, (Updated 2014) Date of access: 19 September 2014, E-source: «http://www.investopedia.com/university/insurance/insurance1.asp»

risks, but, according to the dissertation's structure, the detailed examination about this type of insurance and the factors for its creation will be discussed below in the next parts.

Historically, Benjamin Franklin founded America's oldest, continuously active insurance company in 1752. B. Franklin and several prominent business associates established the Philadelphia Contributory in order to realize the Insurance of Houses from loss by fire. In most cases, the Contributory was a proactive insurance carrier refusing to provide policyholders with coverage for houses and other structures that were not constructed according to strict building standards. Logically, this system made people to build their houses or buildings in accordance with the set standards. During the British occupation of Philadelphia in 1777, the Contributory hired a chimney sweep to maintain the chimneys of insured houses that were still occupied by the policyholders[8].

We should remember that, insurance is the promise of reimbursement in the case of loss, paid to people or companies so concerned about hazards/risks that they have made prepayments to an insurance company. As for the system of insurance market in Uzbekistan, it was realized by the Law of the Republic of Uzbekistan «On insurance activity» in 2002 №: 358-II[9]. All of the insurance transactions in the territory of Uzbekistan are regulated by the present law. As we see, from 2002 the insurance activity in Uzbekistan is developed significantly, for example in 2008, according to the State inspection for insurance supervision under the Ministry of Finance of the Republic of Uzbekistan in comparison with the previous volume of insurance premiums increased by 25.3%, total payments by 77%, the amount received by insurance companies liabilities by 30% and the volume of investments - by 15.7%.

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[8] «Facts and Legends of Insurance Industry History» 10 January 2011 (Updated: 2014), Insurance Journal 2014 by Wells Media Group, Inc. Date of access: 21 September 2014, E-source: «http://www.insurancejournal.com/magazines/features/2011/01/10/185786.htm»

[9] The law of the Republic of Uzbekistan «On Insurance activity» from 5th April 2002 № 358-II. Available on: «http://www.lex.uz/pages/GetAct.aspx?lact_id=44612»

There are 31 insurance companies offering about 200 types of insurance services under 4 classes of fields of life insurance and 17 classes of General insurance. Representatives of insurance companies on various forums and in interviews researchers and journalists have noted the rapid growth of the insurance market of Uzbekistan as a positive feature of its development the increase in the value of indicators provides a basis for the development of insurance, increasing the number of clients of insurance companies and expanding the range of services. The insurance market is gradually acquiring a modern institutional structure, increases as the number of professional market participants, and the number of their varieties. Today it is not only insurance companies and agents, as it was in the state system of insurance, but insurance brokers, surveyors, Adjusters, giving actuaries, the company's assistant.

The table mentioned above gives information about the position of Uzbek insurance companies by considering their amount of insurance premiums and coverage in 2014. As we can see from the 1.1-table, “ALSKOM” gained more than 24 billion soums insurance premium and spent about 2 billion soums for insurance coverage. In insurance industry, this indicator means almost successful year and thereby it toke 6th position among 31 insurance companies of Uzbekistan.

But the study only «surround», and the more value indicators and the comparison of their sizes for individual years does not give a complete picture of the insurance market in Uzbekistan. For example, it is necessary to pay attention to the uneven pace of growth of the insurance market. This also applies to insurance premiums and insurance liabilities. In general words, one major contract of property insurance may significantly increase the liability adopted by the company. For instance, the creation of the Russian oil company «LUKOIL» in the market of Uzbekistan and the concluded insurance contract between «LUKOIL» and «Uzbekinvest» affected on the situation of the company, and on the General indicators of the insurance market of Uzbekistan[10].

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[10] «Insurance Market of Uzbekistan», GISInfo 2013 (Updated 2014), Date of access: 11 October 2014. E-source: «http://sugurta.uz/publish/doc/text49523.html»

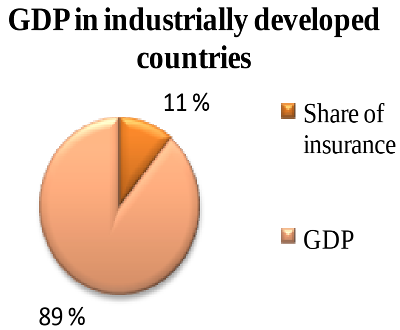
1.1-table

Information on insurance market in Uzbekistan
In the context of insurance companies at the beginning of 2015 (million sums)

№	Insurance companies	Insurance premiums	Difference in %	Insurance coverage	Difference in %
1	Uzagrosugurta	83 076,7	134,7	13 979,3	166,8
2	Uzbekinvest	60 710,4	137,6	12 710,2	47,4
3	Kafolat	42 133,4	135,3	9 301,9	146,5
4	Kapital Sug’urta	26 622,1	142,7	4 206,0	131,9
5	Alfa Invest	25 736,7	124,0	2 577,4	131,5
6	Alskom	24 724,0	133,3	2 020,2	158,5
7	Asia Insurance	23 004,6	66,2	3 263,2	160,5
8	Temiryo'l-Sug'urta	17 594,7	128,5	921,2	96,6
9	UVT Inshurans	17 227,2	113,9	1 175,4	83,7
10	Uzbekinvest Hayot	16 463,5	152,5	9 355,8	157,0
11	Ingo-Uzbekistan	13 168,3	143,9	2 368,8	119,7
12	Agro Invest Sug'urta	11 451,7	309,4	5 379,2	475,7
13	Gross Insurance	8 642,7	170,9	327,9	266,1
14	Euroasia Insurance	7 416,0	197,1	189,1	117,8
15	Universal-Sug'urta	7 291,6	102,9	878,4	57,5
16	Sug`urta O`z	6 715,5	107,1	236,8	112,7
17	Xalq Sug’urta	5 745,5	85,6	1 219,2	131,4
18	IShONCh	5 326,1	112,1	1 265,4	156,3
19	Global Insurance Group	4 134,4	218,5	34,9	30,7
20	Mega Invest Insurance	4 065,1	172,1	242,2	1 215,7
21	Hamkor Sug’urta	3 885,3	198,7	214,4	111,8
22	Silk Road Insurance	3 834,6	168,1	303,3	172,3
23	Kafil sug'urta	3 595,0	140,5	33,8	50,4
24	DD-General Insurance	3 049,4	134,5	395,2	131,2
25	Garant Insurance Group	2 912,3	152,8	95,5	346,0
26	Asko-Vostok	2 701,9	133,6	37,6	975,0
27	Temiryo'l Life	2 692,3	-	612,7	-
28	Alfa Life	2 351,6	226,5	1 106,1	153,0
29	Мадад	1 872,0	140,3	34,4	445,5
30	Unipolis	988,6	50,4	147,0	132,2
31	Chartis Uzbekistan	1,1	0,1	-	-
	Total:	**439 134,1**	**129,7**	**74 632,6**	**111,5**

Source: Ministry of Finance of the Republic of Uzbekistan 2014, Insurance, date of access: 14 February 2015.Available on: «https://www.mf.uz/en/mf-resources-menu/mf-insurance-menu.html».

We know that, by the world science and practice was developed the measure value of the insurance market in the economy of the country. One of them is the share of insurance premiums in GDP of the particular country (1.1-picture).



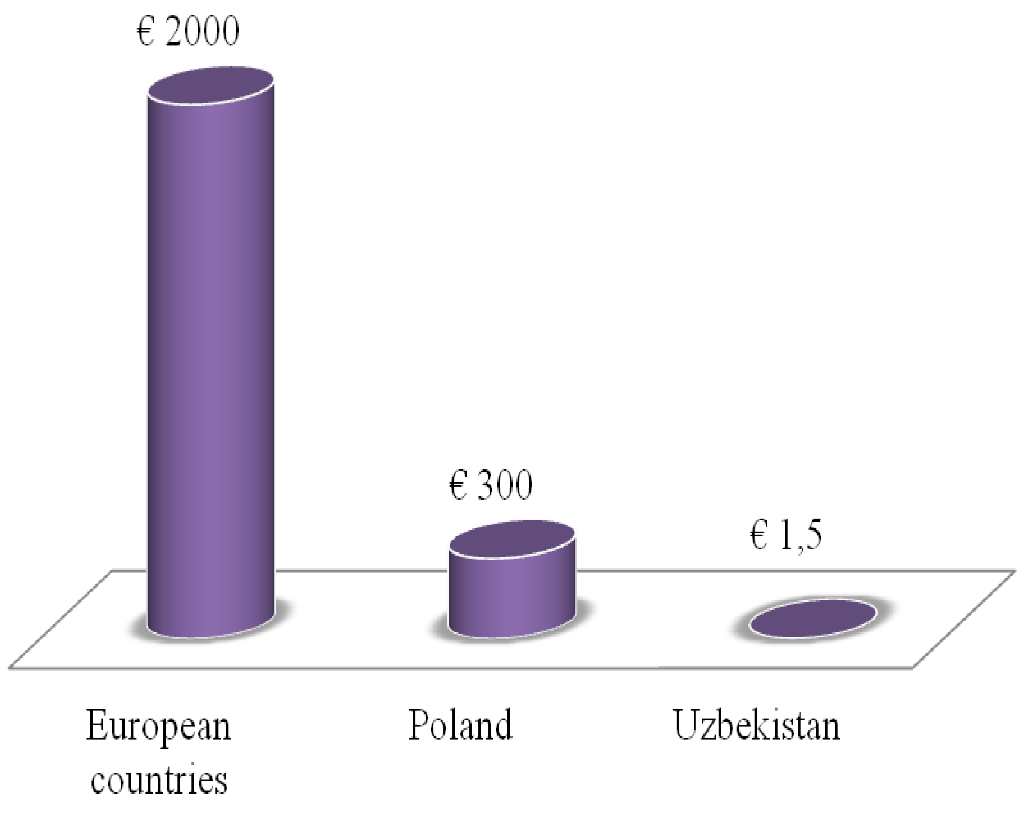
1.1-picture .The comparison of share of insurance in GDP of Uzbekistan with the GDP of industrially developed countries for the beginning of 2015

Source: Insurance Market of Uzbekistan, GISInfo 2013 (Updated 2014), date of access: 11 October 2014, available on: «http://sugurta.uz/publish/doc/text49523.html».

As we can see from pie charts, on the one hand it seems that an index of share of insurance in GDP of Uzbekistan is low in comparison with share of insurance in GDP of industrially developed countries. However, most of the industrially developed countries have achieved their independence about 50 or 70 years ago, but as for the Republic of Uzbekistan, just 23 years ago it was recognized as independent country. In my opinion, the reaching such results during such short period is the significant achievement for this young country. I do believe that, there are countries which do not have even their insurance market e.g. Ukraine.

The representatives and the professional participants of insurance market confirm an ambiguous nature of the insurance market development in Uzbekistan. Such conclusion was expressed during the study of the insurance market, conducted by the Centre for the promotion of economic development of Uzbekistan at the beginning of 2014. According to experts of various insurance companies, the market potential is mastered only 5-17%. However, this potential is only in the sense that the economic entities and the population have the clear need for protection from various risks. However, this need is not turning into effective demand for insurance services. To assess the impact of the insurance sector on the economy, one can use the same GDP. In 2008, Uzbekistan's GDP amounted to 36.8 trillion soum and total insurance liabilities of all insurers almost to 35.7 trillion soums. The striking conclusion is that, an entire economy is insured for an amount less than one annual GDP. In countries with developed insurance sector total liabilities of the insurers exceed GDP several times. Apparently, it still is the negative indication for Uzbekistan.

We can also illustrate the level of insurance penetration in the economy of Uzbekistan by the following fact (1.2-picture).



1.2-picture. Statistic of spent amount of money by citizens for yearly insurance in the beginning of 2015

Source: «Insurance Market of Uzbekistan», GIS Info 2014 (Updated 2014), Date of access: 11 January 2015, available on: «http://sugurta.uz/publish/doc/text 49523.html»

The graph shows that the insurance costs for citizens of European countries are on average more than 2000 euros per year as for the Poland, as we see an average Polish citizen spends about 300 euros for insurance per year. In the end Uzbekistan, unfortunately the amount of an insurance premium per one person is about 1.5 euros. Besides, in Poland, unlike Western European countries or Uzbekistan, there are not many types of compulsory insurance. It means, the level of insurance costs in this country, taking into account differences in the level of income, can be a good reference point. If we consider the difference in income per person (by the methodology of the World Bank – purchasing power parity), the expenses for insurance of the average citizen of the Uzbekistan should constitute about 22 euros (about 55 thousand soums) per year.

The presented picture of the market allows us to see the main today's problem – lack of demand. For example, when insurers say that the potential market for insurance against fire is 10%, they mean that 9 out of 10 homes are not insured. But this fact does not mean that each of the owners of these uninsured homes ready to buy insurance. The question is: all who need to be insured because of some circumstances and who wanted to be insured voluntarily – they already have or acquire insurance as necessary (for example, when traveling abroad or purchasing precious car), but it is a very small part of the population and business. The circle they purchase services limited. Therefore, the task of expanding the number of users of insurance services is an important condition for further development of any sphere from insurance to GDP of the country.

If analyze from the business' point of view, the most business owners have employee and this factor makes them to be obliged to:

- Provide employee with the safe place to work;
- Employ individuals reasonably competent to carry out;
- Timely warn employees of danger;
- Provide employee with appropriate and safe tools, and
- Set up and enforce proper rules of employee conduct as they relate to safe working procedures. In general words, set the labor discipline.

Furthermore, employer is responsible for a degree of safety and concern to his/her customers, clients, and the public-not only for their physical well-being when they are doing business with him/her, but also for protection of their property.

In the traditional or classic insurance market, the basic business insurance package (excluding health insurance) consists of four pieces of fundamental coverage such as, workers' compensation, general liability, movable and immovable property against casualties and an added layer of protection over those, often called an umbrella policy. In addition to these basic needs, a person or business owner should also consider purchasing business interruption coverage and life and disability insurance. In this paper I would like to shortly describe the positions and objectives of the coverage.

Workers' Compensation. Workers' compensation, which covers medical and rehabilitation costs and lost wages for employees injured on the job, is required by law of almost any country including the republic of Uzbekistan. Workers' compensation insurance consists of two components, with a third optional element.

First – insurance covers medical bills and lost wages for the injured employee. This type is very common in most countries of the world and in accordance with the Presidential Decree of the Republic of Uzbekistan «On measures to further reform and development of the insurance market» №: PD-618 form 10th April 2007, this type of insurance has been common in Uzbekistan too. The Article 36, Part VII of the present legal document determines that: «Legal and natural persons providing Assistance services[11], under the insurance contract to provide technical, medical and other services to the policyholder (policyholders or beneficiaries) and insurers, as well as providing them with financial assistance». In other words, legal and natural persons providing Assistance services should act in

[11] **Assistance service** – the type of insurance service created especially for realization of medical insurance services, e.g. when a Policyholder needs to medical service, he/she calls to Assistance service and thereby gets the further directions for his/her therapy.

accordance with the insurance contract concluded with the insurer. Assistance services are paid only by insurers without the policyholder[12].

Second – insurance encompasses the employer's liability, which covers the business owner if the spouse or children of a worker who is permanently disabled or killed decide to sue. Obviously, it is the popular mandatory type of insurance related to employer's liability. As for the operation of this insurance in Uzbekistan, this type of insurance supported by Law of the Republic of Uzbekistan «On mandatory insurance of civil liability of the employer» in 2009[13].

Third – insurance is optional element of workers' compensation insurance is employment practices liability, which insures against lawsuits arising from claims of discrimination defamation and etc.

These types related to workers' compensation partially used in business area of Uzbekistan. It is the fact that, if an organization or company is financially secure then employer will be able to provide employees with a lot of types of insurance, but unfortunately some organizations use only mandatory types of insurance. Some of such organizations financially cannot afford the voluntary insurance but others, stumble at the force of insurance system. This is another aim of the present dissertation that entrepreneurs can rely on the insurance companies and prove their developed activity in the sphere of compensation.

General Liability. As for the general liability, it is another interesting and in its queue very important type of insurance. Basically, comprehensive general liability coverage insures a business against accidents and injury that might happen on its premises as well as exposures related to its products. For instance, a visitor or salesperson slips on a banana peel while taking a tour of entrepreneur's office and breaks his/her foot. In this case, general liability covers his/her claim against an entrepreneur. Another situation, the company is a window-sash manufacturer, with hundreds of thousands of its window sashes installed in people's homes and

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[12] Art. 36, Part VII of the Presidential Decree of the Republic of Uzbekistan «On measures to further reform and development of the insurance market», №: PD-618, 2007. Available on: «lex.uz».

[13] Law of the Republic of Uzbekistan «On mandatory insurance of civil liability of the employer», №: LRU-210, 2009. Available on: «lex.uz».

businesses. If something goes wrong with them, general liability covers any claims related to the damage that results. We understand that the damage cannot be due to poor workmanship and damage causes not by anybody's initiative. Considering this factor most entrepreneurs use the general liability insurance.

Movable property insurance. In my opinion, in our today's life the present type of insurance the most popular type of insurance and the rules are also known almost for anyone. If a person's business provides employees with company cars, or if an entrepreneur has a delivery van, firstly they need to think about auto/car insurance. Another reason for its popularity is that auto/car insurance offers more of an opportunity to save money than most other types of business insurance. The primary strategy is to increase a policyholder's deductible, because then his/her premium will decrease accordingly[14].

Immovable property insurance. Generally, under this type of insurance the object of insurance is the property interests of the policyholder related to ownership, possession and use of property, damage or loss in case of occurring insured accident. Insurance is subject to property which legally belonged to the policyholder. Under the insurance protection can be taken:

- Buildings, structures, and a separate room;
- Warehouses, storage, covered areas;
- Construction in progress;
- Technical equipment and machinery, tools and equipment (expensive);
- Finished products, goods, raw materials and other inventories;
- The electronic equipment;
- Furniture, interior items and etc.

By agreement of the parties to the insurance coverage may be supplemented or replaced by the terms accepted in the insurance practice. Insurance protection may be provided against all risks combined and several risks. In most Uzbek insurance companies, insurance against these risks may be conducted in any

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[14] «Insurance» Entrepreneur Media, Inc. 2014 (Updated 2014), Date of access: 21 October 2014, E-source: «http://www.entrepreneur.com/encyclopedia/insurance»

combination and at any time. Insurance can be carried out both in favor of the policyholder and in favor of another person (Beneficiary), which is based on law or contract interest in the preservation of this property[15].

Umbrella Coverage. In addition to these four basic pieces of coverage such as, workers' compensation, general liability, movable and immovable property/casualty, many insurance agents recommend an additional layer of protection, called an umbrella policy. This type of insurance is very common in foreign countries with developed insurance market, because the Umbrella coverage protects a policyholder for payments in excess of his/her existing coverage or for liabilities not covered by any of other insurance policies. Umbrella coverage used under the different terms in Uzbekistan such as, liability insurance or reinsurance of the liability, but in most, it is an additional term of ordinary insurance contract in Uzbekistan and it has not developed practice yet.

2. Information risks and the factors for their occurrence in economic risks management

The managing information technology security is usually a critical component of any strategy to manage information risks. As mentioned above, in the traditional or classic insurance market, the basic business insurance package (excluding health insurance) consists of four fundamental indemnities such as, workers' compensation, general liability, movable and immovable property against casualties and an added layer of protection over those, often called an umbrella policy. However, as discussed in the beginning, due to permanent and significant development of information communication technologies, the modern insurance market welcomes an insurance of information risks.

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[15] «Property Insurance» JS «Alskom» Insurance Co. 6 January 2012 (Updated 2014), Date of access: 16 August 2014,
E-source: «http://alskom.uz/index.php?option=com_content&view=article&id=86%3A2012-01-06-10-00-18&catid=55%3Adlyafizicheskixlic&Itemid=72&lang=ru»

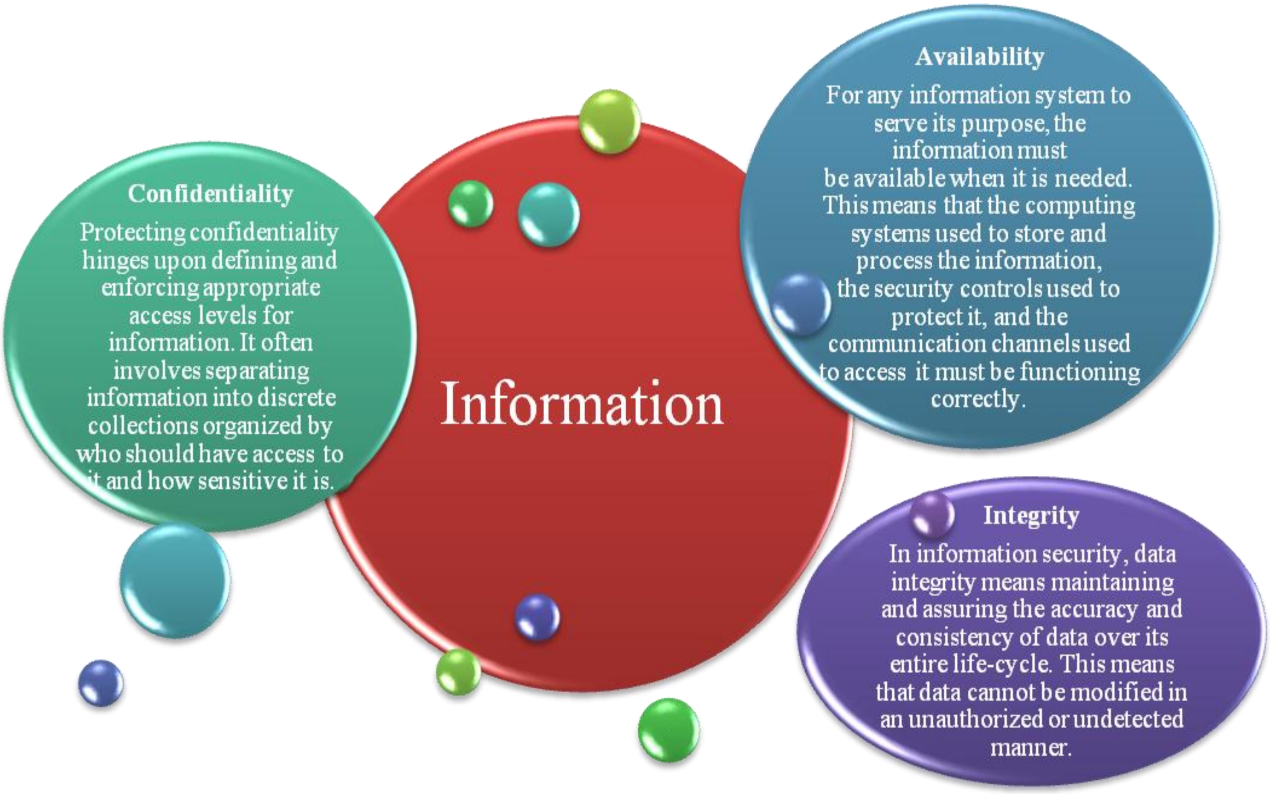
Information is essential to today's society, and to most organizations and departments within government. Information can take many forms – from data sets of confidential personal information through to records of sensitive meetings, personnel records, policy recommendations, correspondence, case files and historical records. Information can be in many formats, from databases through to e-mails, paper, picture, media or video. By the way, information is not the same as information technologies. Basically, information technology systems are the platforms on which information is often exchanged and managed. Therefore, information risks are not necessarily the same as information technology security risks. As for the risk management in the sphere of information system does not only mean the mitigating risk, but also takes considered risks where the rewards are expected to be greater than any short-term losses. In the sphere information risk management, there is such important question: «Should information be shared or not?», for example, in some cases the risks of not sharing information can be more serious than the risks of appropriately sharing it. Similarly, there are potentially significant social and economic benefits to re-using and making the best use of information in the public domain. Information risks have the same characteristics as other risks, and need to be managed with the same degree of strategic consideration.

A risk assessment is essential to prioritize the right actions for each part of government. Some information (e.g. published legislation, official publications and web publications) rarely carries security risks associated with disclosure – the risks around this information are more likely to be about tampering with the official record, or failure to get sufficient dissemination of key information[16].

The notion of information can be described in different meanings but it has three basic principles such as confidentiality, availability and integrity. The information should concur with these principles after which we can secure it. By the way, information risks insurance also considers these principles and

[16] Sir Gus O'Donnell Managing Information Risk – A guide for Accounting Officers, Board members and Senior Information Risk Owners (Crown copyright 2008) 2

compilation with these principles can significantly impact on the price of insurance (1.3-picture).



1.3-picture. Three basic principles of the notion of information

Source: Picture was created by author

As we see, the present circle connects the information with its three basics such as confidentiality, availability and integrity. Nowadays, the information consist of these three basics and all of these basics should be provided in order to protect the most important notion – information.

As for the definition of risk, it was mentioned by Professor Jack A. Jones: «Risk is the probable frequency and probable magnitude of future loss»[17]. This sentence can be discussed much, however, generally it means that, there are three important things to recognize from this definition. Firstly and most obvious for us, risk is a probability issue. Secondly, risk has both a frequency and a magnitude component. Thirdly, this definition for risk applies equally well regardless of whether we're talking about investment, market, credit, legal, insurance, or any of

[17] Jack A. Jones An Introduction to Factor Analysis of Information Risk (Risk Management Insight LLC, London 2005) 8

the other risk domains (including information risk) that are commonly dealt with in business, government, and life. In other words, **the fundamental nature of risk is universal, regardless of context**. The good news is that risk concepts have been studied for generations within other professions, so a great amount of good information is available. The not so good news is that we have, far more often than not, approached information risk as if it were somehow different from the other risk domains. This is one of the first hurdles we have to overcome if we hope to really understand our problem space.

Purpose of risk modeling. The purpose of any risk analysis is to provide the decision-maker with the best possible information about loss probabilities. Consequently, it is crucial that decision-makers accept the risk analysis methodology being used, and that the information resulting from the analysis is in a form that is useful to them. In this regard, the limitations of our traditional information security «risk analysis» methods will become clear.

The factors for risk occurrence. As for the causes creating the risk, we see and hear about them a lot, (e.g. in news, from colleagues and etc.). These factors can be the malicious, active influence of interested persons or occasional negative manifestations of the defects of the external environment, system developers or users actions, accidental or intentional acts of physical and/or legal entities, directed against the interests of the different organizations, the imperfection of the organizational structure credit institution in the allocation of authority and employees, processes and procedures for banking operations and other transactions, their documentation and in accounting, failure servants established rules and procedures, ineffective internal control failures in the operation of systems and equipment, adverse external circumstances beyond the control of the credit institution. So now, when we have the short imagination about the factors and causes for risk occurrence, there will appear the question, «How we can manage or avoid of them».

Basically, this part is dedicated to analyze the main tasks facing organizations during the building a risk management process. It is obvious that, in most cases

Uzbek organizations create their organizational structure similarly to Russian system and in this case Russian practice shows that, the formalization of the process, which can be fixed on the top level of risk management, should be started from creation of particular internal legal document – Policy. The policy is a very important document of any organization, especially for the IT Department, which reflects the approach of the organization to risk management. Key issues are the determination of the object of process, the main components of the process, the distribution of responsibility between different departments of the organization (e.g. in Bank, it may be the risk management Department), the definition of the base level of acceptable risk, etc.

The next task facing the organization is building a threat model. This may involve not only the IT Department, but also Security Department, Quality Management Department, Project Department and other departments of the organization[18].

Threat model – key element in the construction process and therefore one should focus on it seriously. The notion of threat can be faced in different views, but there are three main elements of threat which are described by the following picture. Based on the definition of the threat, the threat can be decomposed into three main parts: *source, action/act, object of influence.*

Apparently, it is often necessary to prove that the new model is complete, in other words, it should describe all possible threats. In this case, the easiest method is to divide each component into the classes. For example, the sources are divided into natural, technogenic[19] and anthropogenic[20], actions/acts at random and non-random. The object of influence is divided into the types of IT resources such as, software, hardware, personnel, processes, and information.

Based on the definition of IT services, from the point of view of Russian IT professionals, all of the IT risks can be divided into 3 large groups such as,

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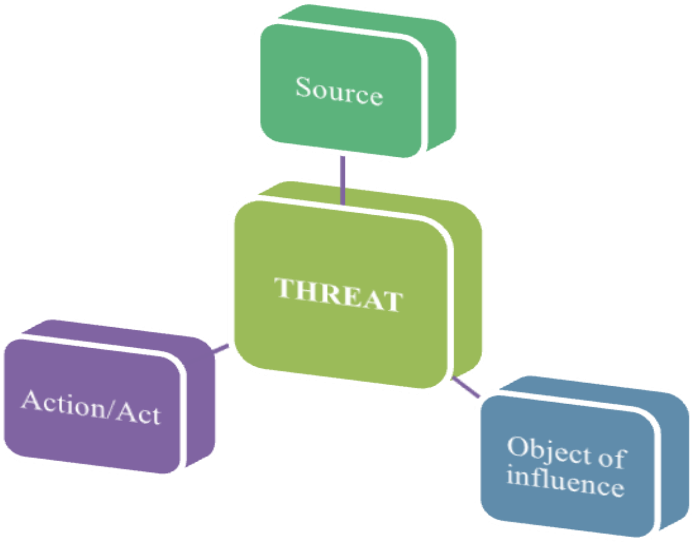
[18] Andrey Golov, «Methods information risk assessment», Energy Consulting 2005-2011, (Updated 2014) Date of access: 23 October 2014, E-source: «http://www.ec-group.ru/press/public/detail.php?ID=56&print=Y»

[19] Technogenic – Etymology techno + genic: technologically caused

[20] Anthropogenic – caused or produced by human

infrastructure risks/risks of information security which is the largest group, the risks of quality of IT services/risk management systems and the project risks. The risks must be considered at all stages of the life cycle of IT systems (1.4-picture).



1.4-picture. Key elements of the notion of threat

Source: Picture was created by author.

Finally, the last objective, from the viewpoint of constructing process is the creation of methodic/methodology related to IT risks. In other words, it would be the creation of practical tools (instruction) for the staff of organization. In order to establish such instruction, an organization should create the following opportunities:

- Flexibly configurable integrated information environment for continuous recording (registering) of events and operation losses ("Incidents base" includes the collection of data from sources IT – IT infrastructure elements). In general words it creates an opportunity to manage the data collection;
- opportunity to analyze and forecast possible losses;
- opportunity to import/export data, comparing the data by the category of industry and etc.;
- flexibly allocate and analyze threats, classify sources of threat and losses;

- collecting the primary data, to minimize human intervention in the process of collecting (desirable);
- provide risk management with the basis for an instant decision;
- evaluate the risks to the quantitative positions (items).

It is obvious that in implementation of any procedures or regulations, there will appear a lot of difficulties the same as in implementation of risk analysis. So, during the survey method of researching I found out that, generally there are three main problems in implementing the risk analysis:

1st – the inventory of IT resources and the determination of their value/cost.

2nd – the determination of the list of threats and the determination of the probability of threat (vulnerability assessment system).

3rd – the definition of vulnerabilities in the system and the probability of threats.

The solution to the first problem is simple - there is a large selection of software tools and due to close cooperation with the software business owners, this problem is simply solved for IT resources owners.

The second problem is somewhat more complicated. When building the single structured tables of IT threats, it would be logical to use the accumulated knowledge, standards and «the best practices». It turns out that, one of the main reasons for close cooperation of the Republic of Uzbekistan with the Republic of Korea is to exchange the knowledge of staff in this area by conducting different forums, training-seminars and etc.

The third task is the estimation of the probability of threats. There are some approaches to solve this problem. Obviously, one takes into account the statistics of incidents, if in the company was implemented an incident management process, also will be taken into account the expert evaluation of implemented tools of control. By considering that often the study of system is a difficult process, we have to process the large amounts of information as it is necessary tool for risk analysis. There are different methods of evaluation and one of the useful methods is the logarithmic model of IBM.

From the point of view of practice, there are known Russian software products in the field of analysis of information risk. For example, the software complex "Grif", developed by the St. Petersburg Digital Security Company, and product "Avangard", created in the Laboratory for system analysis of Informatization problems of system analysis Institute. Unfortunately, the final product has not received proper distribution because of the problems associated with its support, development and sales. From the Western most software products are known complexes CRAMM, RiskWatch, RA, COSSAC and Proteus. Naturally, an employer needs to approach critically to the results of a certain software product due to the limited flexibility in their settings, by considering the specification of the organization or company and accordance with the standard templates[21]. Unfortunately, in Uzbekistan was not conducted any of these methods for risk analysis yet.

However, the world practice shows that, the risk analysis is still the difficult question. Scientists create software, lawyers and Methodists create different standards and policies, but anyway risk stays unclear and in any time it can fail.

Furthermore, in order to fully describe the part of information risks in economic risks management, this paper logically connects this part with the short information about an information technology risk. We know that if a person's business relies on IT systems such as computers and networks for key business activities, apparently he/she need to be aware of the range and nature of risks to those systems. In this case the threats can be divided into general IT threats and criminal IT threats. General IT threats include:

- **hardware and software failure** – such as power loss or data corruption;
- **malware** – malicious software designed to disrupt computer operation;
- **viruses** – computer code that can copy itself and spread from one computer to another, often disrupting computer operations;

[21] Andrey Golov, «Methods information risk assessment», Energy Consulting 2005-2011, (Updated 2014) Date of access: 23 October 2014, E-source: «http://www.ec-group.ru/press/public/detail.php?ID=56&print=Y»

• **spam, scams and phishing** – unsolicited email that seeks to fool people into revealing personal details or buying fraudulent goods;

• **human error -** incorrect data processing, careless data disposal, or accidental opening of infected email attachments.

As for the specific or targeted criminal threats to IT systems and data, generally they are divided into the following categories:

• **hackers** – people who illegally break into computer systems;

• **fraud** – using a computer to alter data for illegal benefit;

• **passwords theft** – often a target for malicious hackers;

• **denial of service** – online attacks that prevent website access for authorized users;

• **security breaches** – includes physical break-ins as well as online intrusion;

• **staff dishonesty** – theft of data or sensitive information, such as customer details.

In my opinion, the main feature of above mentioned threats is that, the most threats are related to human role. By considering this point, I added the part of coaching to the present work. Because, if an employee is culturally and professionally trained for the particular activity, he/she unlikely breaches the liabilities related to threats.

From the technical viewpoint, information risks are also included to the natural disasters such as fire, cyclone and floods also present risks to IT systems, data and infrastructure. Damage to buildings and computer hardware can result for loss or corruption of customer records/transactions[22]. These are the main principles of the information risks in economic risks management and the factors for their occurrence which can direct to the notion that insurance can be the method for information security in economic risks management.

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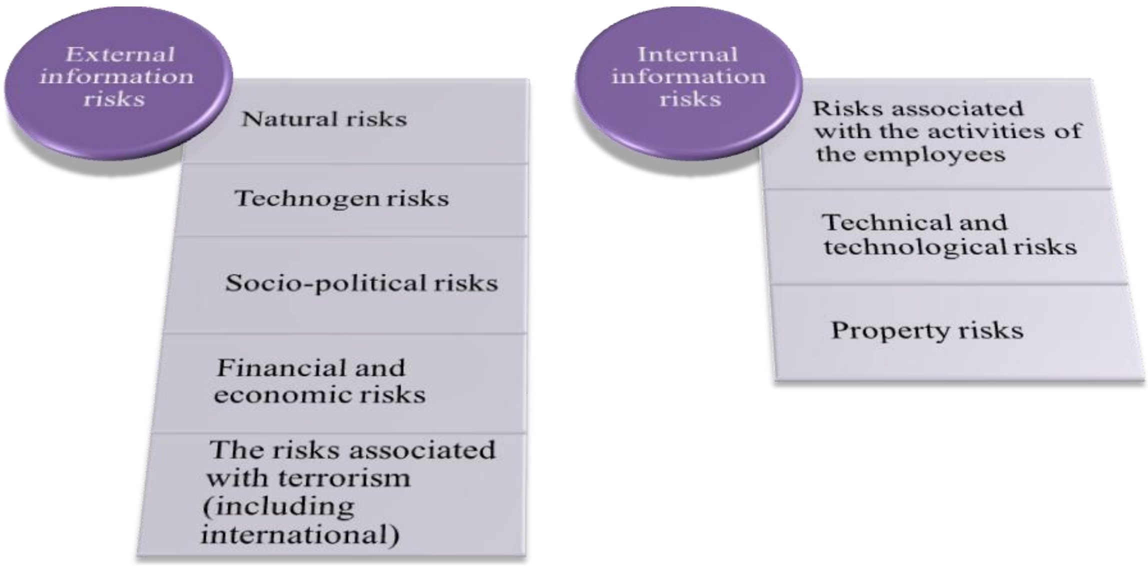
[22] «What is an information technology risk?» Business and industry portal, The state of Queensland 2014 (Updated 2014), Date of access: 19 September 2014,E-source: «http://www.business.qld.gov.au/business/running/risk-management/information-technology-risk-management/information-technology-risk»

3. Insurance as the method for providing information security in economic risks

In the end, the work slightly moved to the discussion of the role insurance in the protection of information. Basically, any entrepreneurial activity is closely linked to the collection, accumulation, processing and using of various information. The uncertainties and risks associated with entrepreneurship are one of its characterizing features. Today, the level of competitiveness largely depends on the ability to protect confidential information from theft, unauthorized use, alteration or destruction. The operating experience of information systems and resources in different areas conclusively shows that, there are a lot of real threats (risks) losses of information, leading to specific material expressible damage. As mentioned above, the analysis and elimination of risk are impossible without their classification. There are different types of risks and criteria to classify them. In short, the figure stated below shows the classification of ordinary and traditional internal and external risks of information security of the enterprise (1.5-picture).



1.5-picture. The descriptions of external and internal information risks

Source: Picture was created by author.

During the interviewing with the related employees of «ALSKOM» Insurance Co. it turned out that, we should recognize that, basically the main practice related to insurance of information came to our country from Russian practice, logically to Russian Federation it came from western countries. That is the reason for discussing the topic in accordance with the Russian practice. According to the Russian statistics, 52% computer crimes against Russian banks which are registered and analyzed, was associated with the theft of funds (money), 16% related to the destruction and annihilation of software engineering (Computer IT systems), 12% related to deliberate distortion of the original data, 10% is the theft of information and programs.

According to experts, the main source of information threats for banks in Russia at the beginning of the XXI century was the serving (including former) staff (up to 90% of cases), and the main types of threats, unauthorized access and viruses (it is believed that almost all banks, without exception, will be subject to virus attacks).

Ensuring information security of the enterprise means information risk management – process definition and using of various countermeasures that allow to some extent to predict the occurrence of the risk event and to take measures to reduce risk. Each variety of risks inherent in their management practices.

The West has long been insured for almost any risks. According to experts, in the developed western countries insurance coverage is approximately 90-95% of all possible risks in Russia now – 5-7%. For instance in the USA, in 1994 the total insurance premium amounted to a huge sum, equivalent to 11.4% of GDP[23].

In Russia the main part of the funds allocated to the protection of information that is spent on the implementation of measures aimed at prevention of information leakage. In the case of the incident of leakage of confidential information the company will have material or moral damage, while spending huge sums on the localization of the consequences of the incident information leakage. Practice

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[23] See page 18 for the indicators of Uzbekistan GDP

shows that only a comprehensive information security system is the most reliable protection of secrets of the company. A comprehensive information security system should include a procedure to manage information risk management at the enterprise. However, approaches to compensation of damage caused by the already implemented information security threats, business leaders are not given sufficient attention. On the other hand the application of methods of damages is often more reasonable from a financial point of view.

There are a lot of types of providing information security systems which have their own methods and means of information protection. Under the existing conditions of development of market relations in the country we can select another method of data protection in the framework of the financial support system of information protection – insurance of information risks.

Information risk insurance of the organization (company) – is a method of protection of information under the financial support of the information security system based on the issuing insurance company guarantees to subjects of information relations replenishment of material damage in case of implementation of information security threats.

The advantages of insurance as a method of protection are obvious. This is not the only way of compensation for material damage. The use of insurance involves the analysis of the object of insurance, as well as a full and thorough audit of the state of information security systems of the organization or company before the conclusion of the contract. The most striking feature of information risk insurance is that, policyholder him/herself interested in it, because he/she will not to overpay premiums and an insurer who does not want to take on insurance "unfinished" system. Thereby, there will appear such conclusion that, insurance plays a stimulating role in the organization or company, by improving its information security system which is able to reduce policyholder's premiums.

Another advantage from the insurance of information risk is also reflected in the increase of efficiency of functioning of the enterprise, resulting in increased trust from potential customers and partners. It is fact that, the present parameter makes activity of the organization closer to international standards. In other words, insurance of information risks is the promise of company to enter international arena. Moreover, insurance of information risk increases information transparency of enterprises in domestic and foreign markets.

Usually the insurance is used as an additional measure of protection information. If other measures prove to be too expensive or unsuitable, the insurance is used as an alternative method.

When an entrepreneur or employer selects insurance as the method of data protection there will be carried out the comparison of costs from loss of information and the cost of measures for its protection. The decision on whether to use a particular method of information protection or will not be made based on the "effectiveness-cost" criteria. When selecting insurance as a method of data protection, it is recommended to pay attention to the following factors:

1. Insurance should be used when the probability of the threat is not very high, but the consequences for information systems major.

2. **An important indicator is the value of the information**. If the enterprise considers important information itself, its confidentiality, availability, then entrepreneur has to direct most of the money to spend on preventing unauthorized access to this information, by using of engineering or software and hardware or cryptographic protection. If the same information has to be recovered, and its loss or modification had little impact on effectiveness of information systems, it is advisable large part of the money should be spent on insurance.

3. The damage from potential losses low at a high enough probability of threats.

In any case, the selection depends on policyholder and the contract concluded with insurer. On the other hand, during the determining the amount of insurance coverage the policyholder must understand that in view of the novelty of insurance, the related statistics, the partnership of insurance company with other insurance companies in order to take **umbrella** measures (in necessary situations), the terms and period of insurance. Today, in Uzbekistan policyholder cannot have such options because, «ALSKOM» Insurance Co. is the single insurance company which realizes its activity in the sphere of information risks insurance. On the one hand, it seems as unfortunate for Uzbek entrepreneurs that they do not have alternative option to choose another insurance company which can insure information risks, but as a coin has two sides, on the other hand it is fortunate for them, because «ALSKOM» Insurance Co. is suitable almost for any insurance requirements and anyway it will be able to cover insurance confiscation[24].

After deciding on the use of insurance as a method of information security, an expert who is liable for information security should give reference the objects, which are the subject to insurance, risk and possible losses, the probability of risk and the size of possible losses and to make a decision about the type of insurance, type of contract, insurance conditions and etc. After selecting the type of insurance, a client must sign a contract with the insurance company. The company may indicate some disadvantages or defects in the existing IT systems of protection and refuse to insure some objects. In this case, it is necessary to eliminate the "gaps" in the system[25].

In order to understand completely the system of information security insurance especially in Uzbekistan, I would like to describe the costly method of determining the cost of recovery information system, affected by the accident. According to the legal standard «Information risks insurance, the methodology of calculating the value of information systems from information risks» established by Uzbek agency of communication and informatization[26] in 2008, when determining of the cost of recovery information system insurer identifies all actual costs associated with the creation, acquisition and introduction of it in action. The present guidance document also provides with the seven formulas of calculation of cost recovery information system which are stated below:

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[24] See Part II, 2.1. JS «Alskom» Insurance Co.

[25] D.G. Dyankov «Insurance risks as a method of protecting information» Amulet-group 2003 (Updated 2013) Date of access: 3 October 2014, E-source: «http://www.amulet-group.ru/page.htm?id=30».

[26] In accordance with the Presidential Decree of the Republic of Uzbekistan from 4 February 2015, today’s name: **Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan.**

The formulas of calculation of cost recovery information system:

$$З_c = \left[\sum_{i=1}^{n} З_{upi} + \sum_{i=1}^{n} З_{umi} + З_{nup} \right] \times a_t , \tag{1.1}$$

where:

$З_c$ – the sum of the costs associated with the restoration of information system, monetary units (soums);

$З_{upi}$ – the sum of all cost recovery information resources in *i* year, monetary units (soums);

$З_{umci}$ – the sum of all costs for restoration of information and communication technologies in *i* year, monetary units (soums);

$З_{nup}$ – development costs (acquisition) and the implementation of the new counter mechanisms to information risks, monetary units (soums);

a_t – reduction factor by which the different time costs are reduced to a single point in time;

i – serial number of the year under review the actions.

$$З_{up} = \sum_{i=1}^{n} З_{бдi} + \sum_{i=1}^{n} З_{бi} + \sum_{i=1}^{n} З_{архi} + \sum_{i=1}^{n} З_{эдi} \tag{1.2}$$

where:

$\boldsymbol{З_{up}}$ – the sum of all costs for restoring the information resources in occurrence of insured case, monetary units (soums);

$\boldsymbol{З_{бдi}}$ – the cost of restoring the database in occurrence of the insured case by *i* risk, monetary units (soums);

$\boldsymbol{З_{бi}}$ – the cost of restoring the e-library in occurrence of the insured case by *i* risk, monetary units (soums);

$\boldsymbol{З_{архi}}$ – the cost of restoring the archive in electronic form in occurrence of the insured case by *i* risk, monetary units (soums);

$\boldsymbol{З_{эдi}}$ – the cost of restoring the document management in occurrence of the insured case by *i* risk, monetary units (soums);

i – an amount of insured information risks.

$$З_{итс} = З_к + З_{тсо} + З_п + З_{пр} \tag{1.3}$$

where:

$З_{итс}$ – the sum of all the restoration costs of information and communication technologies in occurrence of insured case by natural, intentional and unintentional threats, monetary units (soums);

$З_к$ – the costs for restoration – purchase of computer equipment, monetary units (soums);

$З_{тсо}$ – the restoration costs for telecommunication and network equipment, monetary units (soums);

$З_п$ – the costs for restoration – purchase of peripherals[27], monetary units (soums);

$З_{по}$ – the costs for restoration – purchase of software, monetary units (soums);

$$a_t = (1+E)^{tp-t} \tag{1.4}$$

where:

a_t – reduction coefficient of multi results;

tp – calculation year;

t – the present year;

E – rate of return on capital;

$$E = \frac{П_ч}{K} \tag{1.5}$$

where:

E – rate of return on capital;

$П_ч$ – the profit obtained by Policyholder in ***tp*** year;

K – own capital of Policyholder[28].

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[27] A **peripheral** is a "device that is used to put information into or get information out of the computer".
There are three different types of peripherals:

- Input, used to interact with, or send data to the computer (mouse, keyboards, etc.);
- Output, which provides output to the user from the computer (monitors, printers, etc.);
- Storage, which stores data processed by the computer (hard drives, flash drives, etc.).

[28] Article: 4.2 Information risks insurance, the methodology of calculating the value of information systems from information risks, №: RH 45–133:2008, Tashkent 2008

The present guidance document also provides with the seven formulas of calculation of cost recovery information system which are stated above[29].

Moreover, the Article 4.3 of the present legal document discusses the calculation of the sum which is not subject to an indemnity. Basically, according to 4.3.1 and 4.3.2, if information risks insurance is carried out under conditions of insurance of property and (information resources, computer equipment, telecommunications equipment, network equipment, peripherals) as well as the liability insurance (the software system counter information risk), in that calculation the amount of damages must be separately consider the amount of damage caused by a third party (for liability insurance) for sending to Insurer the right of subrogation. As for the calculation, it is made based on which part of the information system was suffered in occurrence of insured event from because of one or more information risks, by accidental or deliberate threats. It is calculated by the 6th and 7th formulas stated below:

The 6th and 7th formulas of calculation of cost recovery information system:[30]

$$P_c = \sum_{i=1}^{n} R_i \quad \text{where:} \qquad (1.6)$$

$\boldsymbol{P_c}$ – insured sum – the liability limit in the insurance case for one or more (all) of information risks, monetary units (soum);

$\boldsymbol{R_i}$ – insured sum – the liability limit by i risk, monetary units (soum);

$\boldsymbol{i}$ – the amount of insured risks.

The calculation of the sum which is not subject to indemnity is made based on the 7th formula.

$$P = P_c - З_c + Ф \quad \text{where:} \qquad (1.7)$$

[29] Article: 4.2 Information risks insurance, the methodology of calculating the value of information systems from information risks (RH 45–133:2008, Tashkent 2008) 7.

[30] Article 4.3 Information risks insurance, the methodology of calculating the value of information systems from information risks, №: RH 45–133:2008, Tashkent 2008

$\boldsymbol{P}$ – the part of insured sum which is not subject to indemnity;

$\boldsymbol{P_c}$ – the insured sum – the liability limit in occurrence of insured case by one or more (all) information risks, monetary units (soum);

$\boldsymbol{З_c}$ – the sum of cost of expenses, related to the restoration of information systems, monetary units (soum);

$\boldsymbol{Ф}$ – franchise – the part of the damage which is not subject to indemnity by the Insurer, set by the terms of insurance contract[31].

As we already find out that, the present legal document is necessary guide for Insurer who realizes own activity in relation with the information risks insurance and the formulas stated above are necessary tools for calculation the insurance premium and indemnity in different terms and conditions. Moreover, this legal document can be used not only by insurers but also by a person who wants to calculate his/her information before insure it.

CONCLUSION TO THE FIRST PART

Generally, the first part discussed an importance of insurance market and the reasons for its existence, information risks and the factors for their occurrence in economic risks management, and also insurance as the method for providing information security. So now it turned out that, the market of insurance was created on the base important life factors and any sphere of our life, just certain stages in life, marriage, retirement finishing in economic factors such as doing any business, working or operating in the particular area. In other words, if there was not the necessity for insurance market, it would not be developed as we see it in our days. Thereby, the part is slightly moved to the discussion of the information risks and how they appeared. That discussion evidencing that information based on three main categories, for instance, information should be confidential, available and

[31] By an insurance policy can be set conditional or unconditional franchise defining the particular part of each loss, which is belonged to Policyholder. It can be installed both in monetary terms and as percentage of the amount of each loss.

integral. From my point of view, the main important discussions of the subpart were the methods for analyzing and managing the information risks. As for the subpart of insurance as the method for providing information security, mainly this subpart is dedicated to logically connect two important aspects such as insurance and information risks, and also to describe how they are related to each other. The people who work in the sphere of ICT clearly know that there are a lot of modern methods and tactics for providing the information with security, besides everyday they are updating, but in anyway as was mentioned by our ascendants: «prevention is better than cure». In this paper this quote means that, an owner of information should provide information with the security by insuring it. To sum up, I would like to say that, information security and the information risk insurance are two different parts supplementing each other's existence.

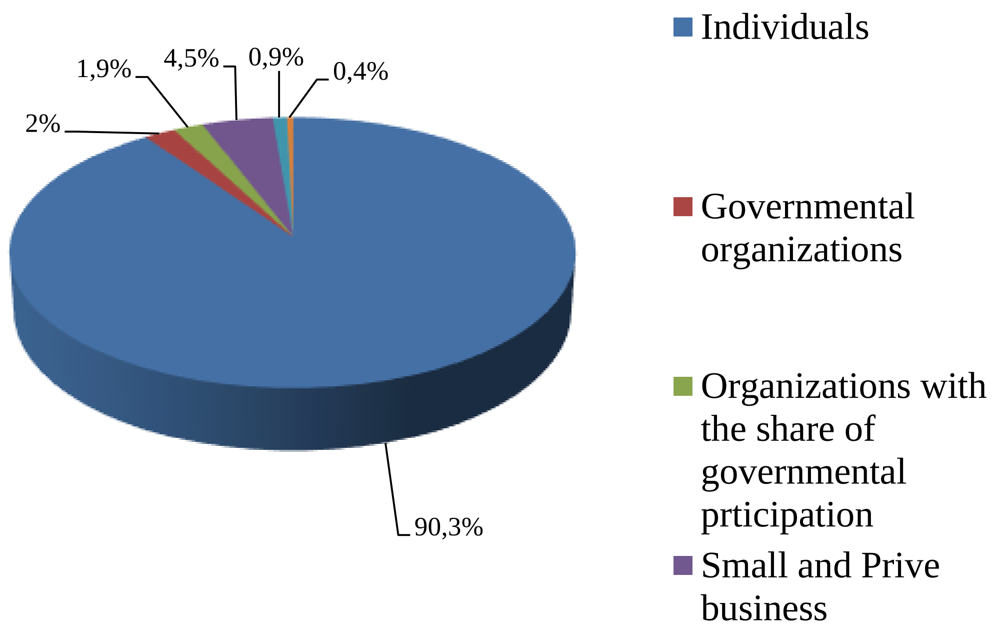
Part II. THE STRATEGY OF «ALSKOM» INSURANCE COMPANY IN RELATION TO INFORMATION SECURITY

1. Stages of development of «ALSKOM» Insurance Company

Initially, «ALSKOM» Insurance Co. (further – ALSKOM) was found in September 1996. Since, a company has been the member of IT-association of the Republic of Uzbekistan, the Association of professional participants of Uzbek insurance market and also member of the Fund of insurance payments guarantee on obligatory insurance of civil liability of vehicle owners (further – OICLVO). Besides ALSKOM is participant of national insurance pool of Uzbekistan and an insurance pool for compulsory insurance of civil liability of the employer. According to Appendix № 1 a company realizes its activity under the License of Ministry of Finance of the Republic of Uzbekistan (СФ № 00164 from 10th January 2012) and services more than 50 types of obligatory and voluntary insurance under the 12 insurance classes of general insurance branch. ALSKOM also has additional activity that is investment and its Formed authorized capital for the beginning of 2014, constituted about € 3 129 730.82. The company has an extensive regional network in the Republic of Karakalpakstan and in all areas of the Republic. To date, ALSKOM has expanded its regional network, which consists of 15 branches located in the Republic of Karakalpakstan and in all regional centers, more than 60 departments and a number of sub-departments in the areas and remote rural areas. Additionally, in 2013 were opened 8 offices in the country, especially in rural areas.

According to the data of SAIPRO rating Agency at the beginning of 2014, ALSKOM is recognized in the list of ten leading insurance companies of Uzbekistan in the number of concluded insurance contracts, the insurance premiums and the amount of insurance payments. According to the Fund of guaranteeing of insurance payments on OICLVO, the Company by the end of 2013 took 4th place in the number of implemented policies and insurance premiums on OICLVO.

As we know in most activities especially in business, the cooperation plays the great role. As for the cooperation in ALSKOM, the company demonstrates high growth performance and 2014 was not an exception for this fact. In the tough competitive environment in the national insurance market, the ALSKOM continuously undertakes measures to develop its activity, and thus retains its leading position. The number of concluded insurance contracts more than 2 times higher than in 2013 and amounted to 337 322 units. Such high growth is achieved by increasing cooperation with OJSC «UZBEKISTON POCHTASI» on sales of insurance policies through the postal network, which has 2 933 offices and more than 3,000 postmen. Due to well-established mechanism in the framework of bilateral cooperation, the insurance services of the company can be used in remote rural areas of Uzbekistan too. More than 90% of insurance contracts accounted for individuals. This evidences the expansion and diversification and revitalization of retail sales (2.1-picture).



2.1-picture. Structure of client base by amount of contracts %

Source: Annual Report of «ALSKOM» Insurance Company for the beginning of 2015.

The volume of collected insurance premiums for the beginning of 2013 amounted to 18.5 billion soums and it is 45% more than in 2013. The volume of accepted insurance liabilities amounted to 4.2 trillion soums, it means the growth amounted to 161%. Day by day, the rate of insurance liabilities becomes more than the rate of insurance premiums. This is the result of the company's commitment to attracting clients by providing them with acceptable insurance protection.

Annually the Company's insurance portfolio was dominated by the property insurance. In 2014, a substantial share of the insurance portfolio fell on vehicle insurance and this is mainly due to the OICLVO. Such a change in the structure of the insurance portfolio was due to the active implementation of this type of insurance by increasing sales and improving customer service. Despite the high growth of this type of obligatory insurance, the share of all types of obligatory insurance in the insurance portfolio of ALSKOM remains unchanged in the range of 30%. It promotes stability and financial stability of the company. Bank assurance remains one of the major divisions of the insurance company. Apparently, this result is achieved due to the liberalization and expansion of commercial banks, especially increasing leasing transactions, the introduction of new types of consumer and other types of lending. In this area, ALSKOM provides the following insurance services:

- insurance pledged under the loan property;
- mortgage insurance;
- insurance of the object of leasing;
- the liability insurance of the borrower for non-credit.

The company actively cooperates with all commercial banks of the country. In addition, establishing and encouraging the partnership and leasing organizations too. In 2013 insurance premiums collected in the amount of 4.5 billion soums, the increase compared with the previous year amounted to 143.5%.

Basically, the main reason for discussing of the cooperation of ALSKOM with the Banks is that as we know the Bank’s operation contains a lot of important information and often there is the great likelihood for its breaking, because there is observed a lot of attempts to such actions. Especially for such situations, ALSKOM has implemented the type of insurance which covers Bank’s expenses for lost and restoration.

The insurance of property pledged under the loan is popular type of insurance in the bank transactions and its share in ALSKOM insurance transactions is constituted 73.7[32].

As for the structure and regional network of ALSKOM, today, the company has an extensive regional network, which consists of 15 branches located in the Republic of Karakalpakstan and in all regional centers, more than 60 branches and number of sales points in the districts and rural areas. In 2014 ALSKOM additionally opened 8 branches in the regions of the country, particularly in rural areas. The expansion of services by the development of a regional network allows the company not only to attract new potential customers, legal entities in the regions of the country, but also to actively develop activities for working with individuals, introducing insurance in the most remote settlements.

As we already can understand, one of the main objectives of the present work is to prove that today it is difficult to imagine modern business without the well-developed information technology systems. The prosperity in the sector of service is primarily depending on the quality and responsiveness of customer service. ALSKOM pays special attention to the development of information technologies and software products in accordance with the principles of modern business. To date, all subsidiaries and branches equipped with modern computer technology and multi-functional printing devices connected to a single data transmission system (VPN).

The following software systems operate in the company:

- software product SUGURTA DATA, which allows to create a single database on completed insurance policies, as well as sales, accounting, analysis and generation of related reports;
- the video conferencing system between the structural units, designed for online meetings;
- portal for accepting electronic applications for maintenance.

[32] Annual Report 2014 of JS «Alskom» Insurance Company 9

The development of information technologies requires the adoption of adequate measures to ensure information security. In order to realize and regulate information security, an executive body of ALSKOM has implemented the Concept of information security.

In the framework of this Concept in 2014 introduced:

- centralized system management on the objects of information system;
- the system of limitation in relation to levels of access to the processed information;
- centralized backup system of storing the information that is intended to restore the integrity of the information system in critical failures;
- centralized management of anti-virus software;
- monitoring employees in the workplace, as well as control access to removable media;
- the introduction of the "Employee Training System" (SET)[33], which allows to training employees and evaluating their knowledge;
- the launch of the online store allows to sell policies through the electronic payment system;
- the implementation of a CRM system designed for automation strategies of interactions between the company and customers, in particular, to increase sales, optimize marketing and improve customer service by storing information about customers and relationships with them, establish and improve the business processes and the subsequent analysis of results.

The information stated above evidences that ALSKOM in its insurance activity emphasizes especial attention to the information and telecommunication systems and in my opinion therefore, through the insurance companies in Uzbekistan, only ALSKOM offers insurance service in the sphere of information security.

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[33] ПО «Система Обучения Сотрудников» (СОС) Available on: www.alskom.uz

Moreover, it is fact that in any activity the achieved results depend on the staff potential of the particular organization and in this issue, ALSKOM attends especial attention to staff policy and development of employees' knowledge too. According to the 2014 reports, in the company operated about 311 employees including 72 employees who work in central office and the rest 239 employees operating in regional subdivisions. About 60 % of the employees have the high degree of education and amount of insurance agents constituted about 200 persons.

2.1-table

Dynamics of volume of insurance premiums

Years	Billion soums
2012	256.3
2013	338.5
2014	436.1

Source: official web-site UzReport, Insurance, updated 27 Januray 2015,
available on: «http://insurance.uzreport.uz/cgi-bin/main.cgi?raz=1&id=128705&lan=r».

2.2-table

Dynamics of volume of insurance payments

Years	Billion soums
2012	43.6
2013	66.9
2014	72.3

Source: official web-site UzReport, Insurance, updated 27 Januray 2015,
available on: «http://insurance.uzreport.uz/cgi-bin/main.cgi?raz=1&id=128705&lan=r».

According to preliminary data, in 2014, insurers Uzbekistan collected 436,1 billion soums of insurance premiums that exceeds the previous year by 29%. This volume of premiums was collected 31 by the insurer, of which 3 the company operates in the fields of life insurance and 28 companies in the General insurance industry.

Note that in the last year of dynamic growth of insurance premiums on mandatory insurance types. The total volume of premiums for obligatory insurance for this period increased to 31.3%, reaching 135.2 billion soums.

Premiums on voluntary types of insurance grew by 27.7%, amounting 300,9 billion soums. As a result, the share of obligatory insurance premiums increased by 0.6 percentage points and amounted to 31.0% of. However, the share of voluntary insurance premiums prevailed with the rate of 69.0%, respectively.

In terms of insurance liabilities was observed higher growth rates than insurance premiums. So, by the end of 2014 insurance obligations assumed by insurance companies increased by 52.9% and reached 247 trillion soums. In particular, the voluntary types of insurance liabilities was 196.1 trillion soums, which exceeds the previous year's rate was 55.8%. Obligatory insurance liabilities increased to 42.7%, accounting for 50.9 trillion soums.

Unlike insurance premiums and insurance liabilities, insurance payments made by insurers in 2014, increased slightly, only 8.1%, amounting to 72.3 billion soums.

In the structure of payments, an increase of volumes on compulsory insurance, as well as the simultaneous reduction of payments under voluntary insurance.

So, during the period of insurance payments on obligatory insurance increased to 44.5%, amounting to 27.6 billion soums. Voluntary insurance amount paid was changed slightly (the decline of 6.4%) and amounted to 44.8 billion soums[34].

It should be noted that during the period of 2013 and 2014 ALSKOM has dramatically reduced the number of insurance agents. This was due to the introduction of certification of insurance agents, which were terminated agreement

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[34] UzReport, Insurance, updated 27 Januray 2015, available on: «http://insurance.uzreport.uz/cgi-bin/main.cgi?raz=1&id=128705&lan=r»

with unskilled insurance agents. Thereby, the company started to build an agent network, focused not on the quantity but on the quality of insurance agents.

As for the staff, in order to improve their skills and knowledge company regularly conducts the trainings and workshops on technology service sales and delivery post insurance services for all types of insurance. In addition, ALSKOM closely cooperates with educational institutions that train specialists in the direction of "Insurance business" and "Economy". Traditionally in Tashkent Financial Institute and Tashkent University of Information Technologies held a competition among students of bachelor and master in the nominations of «the Best thesis, Best master's thesis» and «the Best insurance product». In addition to cash awards, the winners get the opportunity of employment in the company. The introduction of such incentives for students is to improve the system of training in the insurance industry.

2. The position of voluntary and obligatory insurance in «ALSKOM» Insurance Company

Nowadays, in international arena, insurance becomes so popular and important part of human life that the government or insurance companies do not need implement the obligatory type of insurance. As for the Uzbekistan, the situation is unfortunately slightly differs, but it is fixing and the Uzbek insurers tries to cover almost all of the insurance cases in order to achieve the trust of clients, because the trust – promise of development of any business. In order to discuss the voluntary and obligatory insurance in ALSKOM, first of all, I would like to shortly describe these types of insurance.

Voluntary insurance – the form of insurance, which is implementing on the base of insurance contract concluded between the policyholder and the insurer. The general conditions which are subject to compilation in voluntary insurance are set out in the rules of voluntary insurance. Traditionally, the rules of voluntary insurance are developed by the self-insurer and approved by the state insurance supervision. In voluntary insurance, the terms of insurance contract for each insured case are specified in the insurance contract. By agreement of the parties, the terms set forth in the rules of insurance can be changed by the mutual consent of policyholder and insurer. However, some rules may not only be changed but also be excluded. The rules of voluntary insurance must be attached to the insurance contract and awarded to the policyholder under the signature. Unlike the compulsory insurance, in voluntary insurance the policyholder has a virtually unlimited right to establish the amount of insurance. For example, in property insurance, the policyholder can establish the insurance amount of the transferred property insurance in its sole discretion, but not more than the actual value of the property. If property insurance limits the established sum of insurance by the actual cost of property, in personal insurance such boundaries of insurance coverage are not available. The insured sum is established by the policyholder and is consistent with the insurer. Voluntary insurance can be performed by both physical and legal persons. In addition, the policyholder has the right to choose the insurance company and may enter into agreements with various insurance companies insurance contract for various types of insurance. It is worth noting that an insurer has the right not to enter into with the insurance contract with the policyholder, depending on the particular circumstances. The voluntary insurance is limited by the action during the time period of the insurance contract and as we know the voluntary insurance is urgent. The contract is usually concluded for 1 year and then annually or renegotiate bound or prolonged automatically. Voluntary insurance is entered into force from the moment of payment of the insurance premium as a whole as well and pay it in installments (payment of the insurance premium). However, in case of delay making a regular insurance premium, the insurance contract shall be terminated automatically. The fact supporting the implementation of voluntary insurance is an insurance policy issued to the policyholder[35]. As the most insurance companies ALSKOM also realizes its services under the stated

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[35] Pro Insurance «Voluntary insurance», date of access: 7 February 2015, (last updated: 14.06.2013), E-source: «http://proinsurans.ru/vidy-strakhovaniya/837-dobrovolnoe-strakhovanie»

principles. As mentioned above, ALSKOM has a lot of types of voluntary insurance and from them, voluntary medical, voluntary vehicle and voluntary insurance of civil liability for injury to life, health, property of third party or the environment in case of accidents at danger manufacturing object were the broadest types of insurance used in 2014.

Obligatory insurance – the form of insurance, in which the insurance relationship between the insurer and policyholder arising by law of the particular country. In obligatory types of insurance, the government sets the law or regulations and rules for insurance transaction, insurance amounts and rates, insurance objects, the range of insurers, policyholders and beneficiaries are also determined by the government. In obligatory insurance policyholder is obliged to be insured by law against some certain cases which are also determined by the governmental bodies such as the Cabinet of Ministers of the Republic of Uzbekistan, Ministry of Finance of the Republic of Uzbekistan and State insurance supervision. Therefore, Uzbek insurers have to regularly report to governmental institutions about the indicators of obligatory insurance. Basically, in obligatory insurance the policyholder should to insure the liabilities, life, health and property of other persons or their civil responsibility to others for his/her own account or for the account of stakeholders. The Law of the Republic of Uzbekistan «On insurance activity» from 5th April 2002 №: 358-II regulates the main conditions of obligatory insurance, the failure of which leads to financial liability insurer to the beneficiary on obligatory insurance and to the government too.

In Uzbekistan as any insurance contract, the obligatory insurance is also carried out under the contract concluded between policyholder and insurer but as mentioned above its terms and conditions set by the related legal documents. For example:

- The obligatory personal passengers insurance of air, rail, inland waterway and road transport of general use – is regulated by Law of the Republic of Uzbekistan from 7th May 1993, №: 866-XII «On obligatory personal passengers insurance by air, rail, inland waterway and road transport of general use»;

•The OICLVO and other self-propelled machines and mechanisms – is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from 30th December 1994, №: 632 «On obligatory insurance of civil liability of vehicle owners and other self-propelled machines and mechanisms»;

•The civil liability insurance for foreign drivers of vehicles entering the territory of the Republic of Uzbekistan – is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from 12th January 2000, №: 11 "On additional conditions of stay of foreign vehicles in the customs territory of the Republic of Uzbekistan»;

•The obligatory governmental personal insurance of employees working in the systems for the extraction of coal, oil, gas and exploration – is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from 16th July 1994, №: 365 «On obligatory governmental personal insurance of employees working in the systems for the extraction of coal, oil, gas and exploration»;

•The obligatory insurance of construction risks in the constructing of objects at the expense of governmental funds and loans under governmental guarantee – is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from 20th December 1999, №: 532 «On obligatory insurance of construction risks in the constructing of objects at the expense of governmental funds and loans under governmental guarantee»;

•The governmental obligatory insurance of soldiers and conscripts, individual soldiers and officers – is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from 26th January 1994, №: 38 «On governmental obligatory insurance of soldiers and conscripts, individual soldiers and officers»;

•The governmental obligatory personal insurance of employees of tax authorities – is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from 10th December 1994, №: 631 «On the size of insurance sum and insurance tariffs for governmental obligatory insurance of employees of tax authorities of the Republic of Uzbekistan[36]«;

•The OICLVO – is regulated by the Law of the Republic of Uzbekistan from 21st April 2008 №: 155 «On obligatory insurance of civil liability of vehicle owners»;

•The obligatory insurance of civil liability of employer – is regulated by the Law of the Republic of Uzbekistan from 16th April 2009, №: 210 «On obligatory insurance of civil liability of employer».

There are also a number of types of "imputed" insurance, for which the rules of insurance and insurance rates are not set by law, but the presence of an insurance policy is necessary for a particular activity or for those or other benefits and privileges. Traditionally, such types include the insurance pledged under the loan property, insurance of the object of leasing, mortgage insurance, the liability insurance of the borrower for non-credit or voluntary medical insurance. Fortunately, nowadays to such types of insurance is adding the information risks insurance. However, as the recommendation I would like to tell that, information risks insurance should be added to type of obligatory insurance. The reasons for such conclusion are obvious.

Firstly, as we know today the information is priceless and at the same time precious, it means that information the loss of such information can be result for significant losses.

Secondly, any governmental or non-governmental organization which contain precious information or the information related to governmental or trade secret should insure their information against the particular risks, but when such type of insurance is voluntary, the probability for using the insurance is very low and if it will be an obligatory, then any organization will insure their information in accordance the related law.

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[36] «What types of insurance are available in Uzbekistan today?» Governmental portal of the Republic of Uzbekistan 2009, date of access: 11 January 2015, E-source: «http://www.gov.uz/ru/faq/insurance/3022»

Thirdly, thereby insurance would become the main tool for providing information security.

On the one hand, it is true that making the information risk insurance as obligatory is difficult issue, because in the present work was discussed the cost of information that it can be set by the owner of information and insurer proportionally to this cost will set the cost of insurance premium. However, the Article 923, of Civil Code of the Republic of Uzbekistan strongly states that: «The objects subject to obligatory insurance, the risks which should be insured, and the minimal amount of insurance coverage are determined by the legislation»[37]. In accordance with the present article an owner of information cannot to set the cost of information him/herself.

On the other hand, this problem can be solved by other methods, for instance, as any obligatory insurance the obligatory information risks insurance can also be provided with the special tariffs which are implemented by the legislative body of the Republic of Uzbekistan and Policyholder can insure his/her information in accordance with the published tariff, the same method can be used for governmental and non-governmental organizations. Besides, considering that in Uzbekistan only ALSKOM offers information risks insurance an introduction of law on the obligatory information risks insurance would be difficult, but real.

In anyway, by analyzing the voluntary and obligatory insurances it turned out that the main difference between voluntary and obligatory insurance, defined in the title of this form of insurance. If voluntary insurance the choice of "to be or not to be" is wholly dependent on the will of the Policyholder, and everyone has the right to decide to protect his/her interest or not, in obligatory type, the freedom of choice in this regard, the society imposes constraints. In certain cases, the government legally obliges persons to insure only the certain interests. It can be as the interests of society as a whole, for example, the protection of environment and the interests of private persons, which the society or government consider necessary to protect

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[37] Article 923, Chapter 52 Insurance, Subsection 3-Certain types of obligations, 2nd part of Civil Code of the Republic of Uzbekistan

regardless of the wishes of those citizens. For example, the contributions for obligatory health (medical) insurance are collected from employers not because the employer has an insurable interest in the health of an employee, but because insurable interest in people's health is society as a whole. The situation is similar with the pension insurance. In other words, obligatory insurance is a form of insurance in which the liability insurance for certain interests is established by the governmental law, in contrast to voluntary insurance, which is made at the request of interested persons. An important difference is that, in obligatory insurance an indemnity of damage arose in insured case is set by law and not by the choice of the policyholder, as in the voluntary insurance. The law on citizen may be obliged to insure the life, health or property of other defined in the law of persons in case of harm. The duty to insure the life or health may not be imposed by law. For example, if the insurance obligation does not derive from the law, and based on the lease agreement with the owner of the property, such insurance is not considered as obligatory[38].

Unfortunately, today the statistics show that the majority of citizens especially in Russian Federation, Central Asia including Uzbekistan, strive to insure not all their property, and only the most valuable things, for example, citizens are much more likely to insure personal cars than own life.

ALSKOM implements its insurance activity in accordance with such general principles of the voluntary and obligatory insurance. As for the information risks insurance, in the company this type of insurance is included to category of property insurance.

Unlike previous years, in 2014, property insurance services, as legal entities, were actively used by individuals too. This was promoted by the introduction of a new insurance product insurance housing, villas and other property of citizens. In this type of insurance totally were sold more than 7500 insurance policies.

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[38] Elena Baydak, «The differences between obligatory and voluntary insurance» Success insurance 2011, date of access: 21 January 2015, E-source: «http://good-lifeinsurance.ru/otlichie-obyazatelnogo-strahovaniya-ot-dobrovolnogo/»

Considering the increased interest of people in the present insurance services, in the coming years expected sharp increase in sales of this insurance product. For the beginning of 2015, the insurance services in ALSKOM were also provided by the following types:

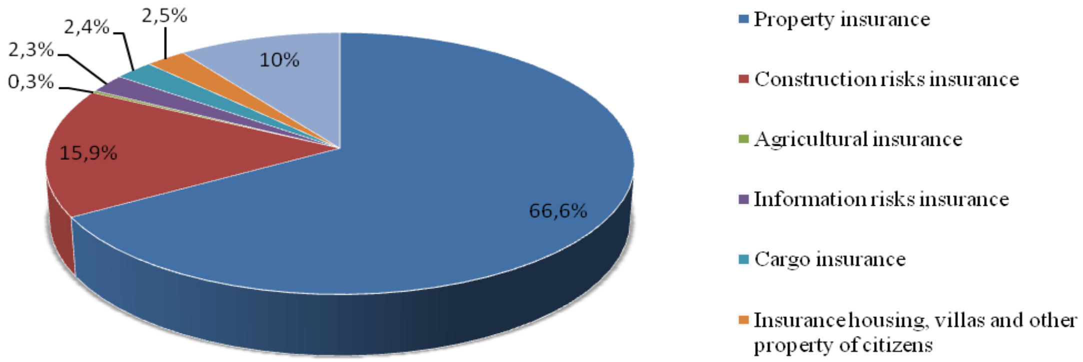
- property insurance;
- insurance of electronic equipment;
- cargo insurance;
- insurance of construction risks;
- agricultural insurance;
- information risks insurance.

Total insurance premiums in this insurance category, amounted to 5.3 billion soums, an increase compared with 2013 amounted to 124.3%.

The basic part of insurance portfolio constitutes the property insurance, although the number of concluded insurance contracts it is inferior to other types of insurance. This is the result of the fact that the main consumers of service for this category of insurance are corporate clients.

Unfortunately, today the information risks insurance is not common as other types of insurance and there are a lot of reasons for such indicator. First of all, in my opinion insurance companies cannot deliver the meaning and importance of information risks insurance to owners of information or heads of organizations which contain a lot of confidential information which should be secured. The indicator of information risks insurance in ALSKOM's portfolio reached 2.3% which is almost for any type of property insurance except electronic equipment insurance. From my point of view, in 21st century when the ICT is developed so much and continuing developing this indicator is not appropriate. This work describes the importance of information and one of the objectives is to increase this indicator, because today any information should be secured.

Any kind of information should be safe and secure (2.2-picture).



2.2-picture. Structure of portfolio on insurance premiums for the property insurance for the beginning of 2015 %

Source: Annual Report of «ALSKOM» Insurance Co for the beginning of 2015.

According to the present pie chart we can see that the percentage of information risk insurance in the insurance portfolio just 2.3%. Apparently, it is very low percentage for our days, when information technology is so developed and there are the significant opportunities for its loss. Today the main objective of ALSKOM and the present work is to increase this index and in order to realize this objective there were implemented a lot of actions.

3. The methods for economic risk management in «ALSKOM» Insurance Company

In 10th January 2011, the Uzbek agency of communication and informatization[39] approved the Order № 5 and according to 6th point of this order, ALSKOM was firstly should implement the normative legal documents related to

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[39] In accordance with the Presidential Decree of the Republic of Uzbekistan from 4 February 2015, today's name: **Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan**

information risks insurance to the organizations and companies operating in the sphere of IT and thereby to popularize it at the level of republic[40].

Basically, in ALSKOM information risks management realizes on the basis of an approved description which is consist of 3 stages. As we already know, generally there were approved 4 normative legal documents in order to regulate and implement the information risks insurance.

1. **The rules of information risks insurance in economic risk management** – the rules set the procedure and conditions of information risks insurance.

This legal document was developed by the Center of scientific-technical and marketing research Uzbek agency of communication and informatization. As for its creation, it was made by the department of marketing and securities of the Uzbek agency of communication and informatization. The rules were approved and put into effect by order of the Uzbek agency of communication and informatization from 1st December 2008, № 332. This guidance document establishes the procedure for insurance risks with the purpose of realization of the mechanism of compensation of financial losses to the owners and users of information systems, technology and resources from loss, theft, tampering, leakage, tampering, block information in the computer crime and fraud, unauthorized acts of third parties, faults, failures and errors that occur in the hardware and software of computing, unskilled and deliberate actions of staff. The provisions of this guidance document is recommended for use in «ALSKOM» Insurance Co. and to all legal and natural persons who are owners, tenants and users of information systems, resources and technologies[41]. According to the rules, in insured risks, compensates the losses associated with the loss, destruction or corruption of data, loss of securities or funds in electronic form as a result of the occurrence of the following events:

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[40] Order of Uzbek Agency of communication and Informatization, № 5 from 10th January 2011
[41] Guidance Document The rules of information risks insurance №: RH 45-196:2008

•failures (failure of information systems due to errors in their design, development, creation, installation, configuration, maintenance, or operation;

•deliberate illegal actions of employees of the Policyholder committed alone or in collusion with third parties with the purpose to cause damage to the Policyholder or to obtain illegal financial benefit;

•computer attacks against the Policyholder by third parties;

•intentional wrongful actions of third parties aimed at unauthorized modification, copying, damage, destruction of electronic data, permanent or temporary disabling of information systems of the Policyholder;

•computer viruses - fragments of malicious computer code or electronic instructions, and capable of self or when they are activated users replicate and spread in information systems and networks (this includes also «Trojan horses», «worms», «logic bombs»);

•theft of money and securities in electronic form as a result of unauthorized third party access to the information system, including the made by:

a) input fraudulent e-commands in the information the system of the Policyholder;

b) unauthorized modification of computer code (programs) of the Policyholder;

c) transfer rigged (fraudulent) electronic orders, supposedly coming from the name of the Policyholder, the Bank or the Depositary of the Policyholder.

The Policyholder may insure as complete package of risks and choose only those risks that seem to be the most relevant.

Moreover, Articles 4.3.2, 4.3.3, 4.3.4 of this Guidance Document strongly set that, the damages associated with the loss, destruction or corruption of data, loss of securities or funds in electronic form as a result of the occurrence of the following events are not subject to indemnify:

•floods, earthquakes, fire;

•any kind of military actions and their consequences, acts of terrorism, civil unrest, strike, confiscation, requisition, seizure or destruction of the object of insurance by order of civil or military authorities, emergency or special provisions;

•the impact of nuclear energy in any form. Besides, the damages associated with the use of unlicensed software are also not subject to indemnify as well as indirect losses incurred by the Policyholder shall be reimbursed only in those cases when it is stipulated by the insurance contract.

As for the insurance contract, as the classical or traditional contract for the conclusion of the information risks insurance contract, the Policyholder is obliged to fill in the application-form for insurance, in the form provided by Insurer. The application for insurance is filled personally by the Policyholder or his/her authorized representative. All items on the application for insurance must be completed in legible handwriting, does not allow dual interpretation. Responsibility for the accuracy of the data specified in the application for insurance shall be borne by the Policyholder. The completed application shall be signed and certified by the Policyholder or his/her representative. In the information risks insurance contract must be installed:

•subjects of insurance;

•objects of insurance;

•insurance risks;

•the territory of insurance coverage;

•the sum insured limit of liability of Insurer;

•the amount and procedure of payment of the insurance premium;

•start date and end date of the contract;

•in accordance with an agreement between the Insurer and Policyholder can be provided conditional or unconditional franchise, with indication of its size and conditions.

At the conclusion of the insurance contract, the Policyholder must:

•notify Insurer known to him/her the circumstances essential to determine the probability the occurrence and amount of possible losses from its occurrence (insurance risk), if these circumstances are not known and must be known to the Insurer. The circumstances specified by the Insurer in the information risks insurance contract (insurance policy) and/or in the written application of the Policyholder on the insurance are the substantial circumstances;

- present to the Insurer the documents certifying the ownership of the information system, information resources, and technology.

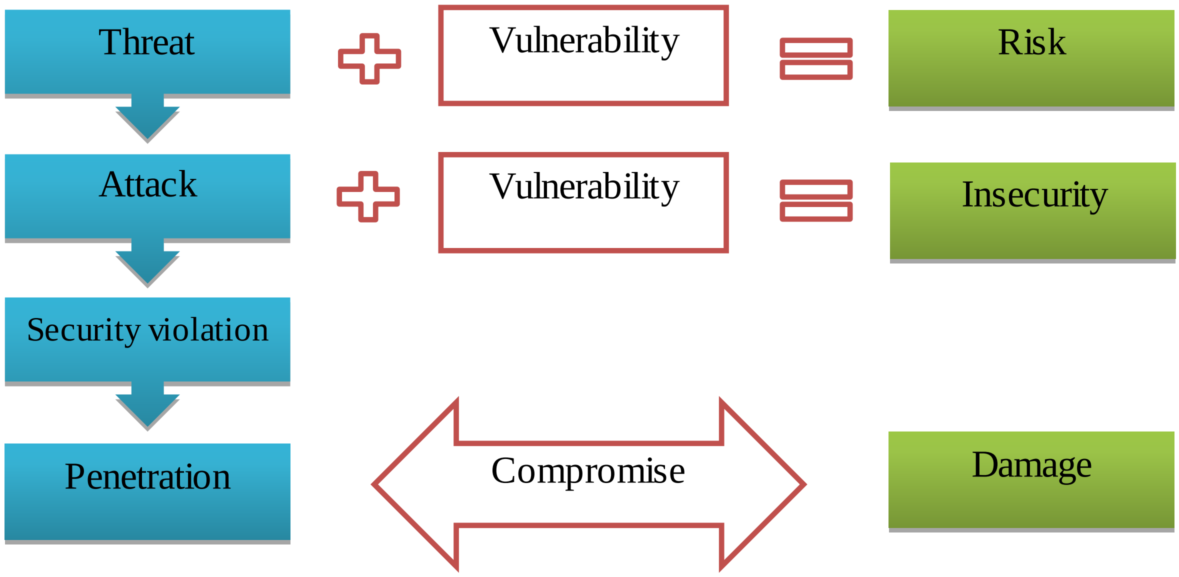
If the Policyholder is not an owner information systems he/she must present a civil law contract concluded with the full-fledged owner of the information system for the right to use the information system and, consequently, the information resources and technologies.

If after conclusion of the insurance contract is established that the Policyholder has reported to Insurer intentionally false information about the circumstances specified above, an Insurer is entitled to refuse the Policyholder to indemnity, and also require recognition of an insurance contract as invalid. Moreover, in the information risks insurance contract must be installed the time period of the validity of insurance contract (Insurance contract or policy can be concluded maximum for three years).

2. **The methodology of accounting the cost of information systems in economic risks management** – the methodology identifies and accounts the restoration cost arose in case of destruction of the information resources. Basically, this legal guidance document establishes the procedure for determining the value of information systems, namely the cost of their recovery upon the occurrence of risks as well as the basic formulas for its accounting provided in page 40-42 of this project.

3. **The methodology of an estimation of damage and the sum of insurance coverage** – this methodology determines the information risks in economic risk management, estimates the damage and threat, identifies the damage which can be arise in insuring the information risks, also it determines the amount of insurance coverage in case of caused damage to information. This legal guidance document establishes the method for assessing damage from security

threats and determining the amount of insurance compensation. This methods can be described by the following information (2.3-picture).



2.3-picture. The level of security violation

Source: Picture was created by author.

Attack – attempt to compromise computer security e.g. a malicious program or interception.

Compromise – the violation of computer security, resulting in a program or data can be modified, destroyed or may become available to unauthorized entities.

Information resource – the information, data Bank, an e-database in the part of the information system.

Information system – a set of organizational ordered information resources, information technology and communications, allowing collect, storage, retrieval, processing and use of information.

Security violation – bypass of computer security systems or break of any element, which can be the result for penetration in the data processing system.

Insecurity – an ability to use a specific vulnerability data processing system for specific attacks.

Penetration – unauthorized access to the data processing system.

Risk – the possibility of using specific vulnerability data processing system during the implementation of specific threats.

Vulnerability – weak spot or gap in the data processing system.

According to this guidance document risk assessment information system of the Policyholder protection of each asset is determined using the analysis of threats acting on a particular resource, and vulnerabilities through which these threats can be implemented.

In order to assess the risk information, it is necessary to analyze all the threats acting on the information system vulnerability, through which is possible to realize a threat. Basically, threats are divided into technological and organizational nature. Technological threats impact can be divided into physical and software (logical). The next step of the classification is the cause of the threat. Causes of physical threats can be the actions of the offender (person), force majeure and failure of equipment and internal systems. Regardless of the reason, physical threats affect information resource and the communication channel.

From the legal viewpoint, an object of the local offender can only be an information resource. However, on the local resource, the offender may implement threats to the operating system, application software, and information. Threats from a remote intruder, can affect the resource and communication channel. In access to an information resource, a remote attacker could impact on the operating system, network services and information. In expose to the communication channel remote intruder can implement threats on network equipment and communication protocols. Organizational threats by nature are divided on the impact on staff, personnel actions. As we already know, impact on staff can be physical and psychological. Both physical and psychological impact on staff aimed at employees of the Policyholder with the purpose of obtaining information and breach of continuity of business. Personnel actions that can cause threats to information security are divided into intentional and unintentional. Threats caused by intentional human actions, can be directed to the information or breach of the continuity of the business. Threats caused by unintentional human actions, can also be directed to the information, the continuity of the business. Thereby, the classification of threats is divided according to the nature of the threat, impact, cause and object of the threat[42].

4. **Guide on implementing an expertise of information security system in economic risks management** – this guide identifies the procedure of expertise in the information network related to examination of the gaps of information security in the network as well as checks the events, factors related to loss of the information.

The mentioned legal documents were approved by the № 332nd Order of the State Committee for Communication, Informatization and Telecommunication Technologies of the Republic of Uzbekistan (Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan) in 1st December 2008 and the copyright on them was registered by the Copyright Protection Agency of the Republic of Uzbekistan in that year. The Copyright Protection Agency of the Republic of Uzbekistan provided the «UNICON.UZ» SUE[43] and «ALSKOM» Insurance company with the copyright.

According to these normative legal documents, the mechanism of information risks insurance is realizing on the basis of 4 stages:

1st stage – Analyzing

In this stage, the staff of ALSKOM liable for information risks insurance filling outs the special application-forms in organizations and companies and these application-forms will be the basis for concluding the insurance contract. The data indicated in such application-form plays very important role in estimation of the information risks, because by considering this information an Insurer decides to accept the information risks insurance or not. Thereby, the related experts implement an expertise (audit) in information security system of Policyholder on the basis of «Guide on implementing an expertise of information security system» and will provide the report on the results of implemented expertise. Insurer will set

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[42] The methodology of an estimation of damage and the sum of insurance coverage (RH 45–199:2008, Tashkent 2008) 2-5

[43] SUE – State Unitary Enterprise

the terms and conditions of insurance on the basis of this report of the special expert group.

2nd stage – elaboration of the terms and conditions of insurance

In this stage, Insurer, first of all, with the agreement of Policyholder elaborates the list of the risks which are subject to insurance. The present list can include the risks related to the loss, extermination or damage of e-information, the loss of shares or money, for example:

- The breaking of information system by the mistakes in projecting, creating, implementing, installing, configuring, serving or using;
- intentional unlawful actions of third parties or Policyholder's employees directed to earn by destruction of information system of Policyholder;
- the computer attacks against to Policyholder by third parties;
- intentional unlawful actions of third party directed to changing, copying, destroying or extermination of the e-information of Policyholder without his/her accepting, as well as the temporarily or wholly destruction of the information systems;
- the computer viruses – an influence of the fragments of e-instructions, by activation or independently self-recreated and distributed computer codes in information networks or systems;
- acts of the third parties, including:
- the making of spy commands to information system of Policyholder;
- the modification of the computer code (software) without the accepting of Policyholder;
- theft of e-shares or e-money of Policyholder by making the fake e-commands on behalf of the Policyholder to the Bank or depositary of a Policyholder.

The next step is an identification of insurance sum on the basis of insurance objects. If the information is registered, created for own account or lawfully purchased, it is considered as the property of its owner. Therefore, the rules provided in the legislation of the Republic of Uzbekistan on the property insurance are applied in the present type of insurance too.

The followings are applied as objects of information risks insurance:

- information resources – any type of e-information (databases, e-library, archives in any type of storages), software tools and complexes in manufacturing, production or using;
- financial actives – the written money in e-accounts (bank-client software/database), e-shares.

The following insurance cases can be included to insurance protection/coverage as additional terms:

- the losses arose by causing of temporarily pausing the commercial activity in occurrence of insured case – it can be the profits which were not obtained during the restoration processes, the expenses for supporting and recreating the business, e.g. salary payments of employees, obligatory payments and the payments which are not related to the manufacturing object;
- the additional expenses for urgently recovery of the business:
- the temporarily renting of the equipment;
- using of the processing services of other organizations;
- the expenses for urgently changing of the software and tools;
- the expenses for examining the insured case;
- the expenses related to the protection of the status of Policyholder.

The sums of insurance (amount of liabilities) are defined in accordance with the cost of information systems stipulated in «The methodology of accounting the cost of information systems».

In the next, Insurer will make the insurance tariffs. An insurance tariff identifies an insurance premium which should be paid by Policyholder to Insurer according to insurance contract. An insurance tariff is determined for each insurance risk and its amount is set by considering the results of conducted expertise on information security, by the level of information security and the level of risks.

3rd stage – concluding an insurance contract

Traditionally, after the agreement of insurance terms and conditions, Policyholder and Insurer will conclude an insurance contract. The terms and conditions of information risks insurance are set in accordance with «The rules of information risks insurance». After the payment of insurance premium set by insurance contract, an Insurer provides Policyholder with insurance policy confirming the entered into force insurance liability on the particular insured objects. As we know according to the Uzbek or other legislation, any contract is considered as the main powerful legal document in order to solve the conflicts between the parties in case of the failure to comply with obligations. Therefore, any contract including insurance contracts should be concluded carefully.

4th stage – examination of insured cases and payment of insurance indemnity

In occurrence of insured case/event, there will be organized the expert group or invited special expert organization. The experts operating in accordance with «The methodology of an estimation of damage and the sum of insurance coverage» and thereby will set the amount of insurance indemnity/coverage. Finally, the determined amount of insurance indemnity within the insured sum will be indemnified by ALSKOM.

CONCLUSION TO THE SECOND PART

In the second part there were discussed and examined the activity of «ALSKOM» Insurance Company its history and stages of development after which the position of voluntary and obligatory insurance in «ALSKOM» Insurance Company, how they were implemented in the company, their advantages and the gaps which should be revised, thereby the part slightly moved to the analysis of the methods for information risk management in «ALSKOM» Insurance Company. I found out that the main objective for creation of the ALSKOM was to strengthen the IT insurance and thereby to provide IT systems with the security, but despite this, ALSKOM also developed other insurance types and regularly contributes to development of insurance industry as well as economy of Uzbekistan. The company has own strong position in insurance market and serving obligatory and voluntary insurance which means that the company is ready for accepting the information risks insurance. Besides, in the part also was examined that ALSKOM will be able to implement information risks insurance in the obligatory conditions too. Eventually, the most important examination was the discussion of the methods for information risk management in ALSKOM, in other words, it turned out that any action relation to information risks insurance is supported and regulated by the relevant legal documents. It obvious that, in any government any transaction or activity should be legally stipulated and in our government the legislation clearly set the regulations in order to realize the information risks insurance services.

Part III. THE ECONOMIC RISKS MANAGEMENT AND ITS DEVELOPMENT

1. The effective ways for information risks insurance in insurance companies

As we already understand, there were described a lot of ways and techniques for information risks insurance in the present work. As for the effective ways for information risks insurance in in insurance companies, basically this option depends on the owner of information as well as Policyholder, because as it was discussed in the parts above, insurance is categorized for different conditions of information. For example, for Banks there is especial type of insurance or for ordinary employers of middle class organizations there is another type of insurance with its especial conditions and tariffs.

It is obvious that, today ICT is characterized intensive introduction in all spheres of activity. Especially ICT is widely used in state government both federal and federated entities, such as credit institutions banks, stock exchanges, funds, in large backbone companies such as oil, gas, energy companies trade and other organizations. In general words, today it is difficult to find the company which does not use ICT.

However, today much more frequent unauthorized exposure of information technology from both the competitors and their own employees. Moreover, the magnitude of damage can vary from hundreds of thousands of dollars for small firms to millions of dollars for credit institutions. If the damage is significant, it may lead to a decrease in revenues, a decrease in the customer base, reducing the confidence of the customers and, ultimately, to the cessation of activity, bankruptcy organizations.

That is why most organizations devote significant resources for providing information security. Experts estimate that 15-20% of the value of information systems is the cost of creating a system of information security. Information security is provided by a number of methods, such as organizational, programmatic, technical and economic methods. Typically, organizations use a set of security measures.

As we know the economic methods of information security is based on the information risks insurance of individuals and legal entities. The information risk is an event occurring with a certain probability, leading to the removal or alteration of information and to the detriment of the owner or the owner of the information. Events leading to the damage may include the following events: the impact of programs, viruses, unauthorized access to information, failure and hardware failures, software errors, intentional action and unskilled staff.

All of the above methods of information security, except economic, lead to a decrease in the frequency of occurrence of a particular event, because they are the barrier to information. However, logic says that remedy cannot be appeared before a cure of the disease, for example, a virus first appears and then anti-virus software. Therefore, damage can occur to organizations and foreign statistics show that this damage can be significant.

In order to compensate for the damage, reduce financial losses organizations stabilize income and maintain the confidence of customers by using the information risks insurance. In order to carry out insurance of information systems and resources it is necessary to determine their value, carry out an audit of information security, determine the reliability of information systems, calculate rates and enter into a contract of insurance with an insurance company. Carrying out these activities requires the creation of complex regulations and guidance documents, statistics, calculation of basic tariffs, determine the conditions of insurance but still it is one of the effective ways for information risks insurance in the sphere of ICT.

In «ALSKOM» for several years carried out work on the study of the field of insurance in the field of information technology. As a result, drafted documents for the insurance examination, insurance regulations and tariffs were calculated.

It is true that, information risks insurance increases the costs of organizations on information security by approximately 2-3% of the value of the information system and but most importantly, reduces damage to organizations in the implementation of information security threats to a minimum[44].

But, in any case there are some universal classic principles of storing the information in order to provide its security which should be undertaken before insuring the information against risks. In this part, before describing the effective ways for information risks insurance in the sphere of ICT, I would like to shortly discuss about one of such principles called the importance of periodic security assessments.

We would not want to fly on a plane that has not had its regular safety inspection or take a road trip without checking our oil and tire inflation or miss an annual trip to the doctor because these are very important for us. Similarly, periodically assessing one's IT security is an important part of his/her organization's preventive maintenance plan Security is mostly an invisible attribute. Usually, people tend to set it up and then forget about it. But each of us has our blind spots, causing us to miss things. Our infrastructure changes over time, possibly opening it up to new vulnerabilities and new methods of attack are invented daily, so what was secure yesterday may not be secure today. Just as every car comes with a list of scheduled maintenance items, our IT organization should have a list of security features to audit on a periodic basis. A person can do many of them him/herself, but there is no substitute for having an independent expert occasionally check for your blind spot.

There are a lot of benefits to making the periodic assessments beyond simply complying with government regulations. Undertaking regular assessments can help owner of information to:

- Find out whether his/her security has already been compromised.

A person might not know unless he/she look, and will sleep better at night if he/she know;

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[44] V.N. Hovanov «The role of information security risks in the organization's information security» 2009, date of access: 23 February 2015, E-source: «http://www.okbsapr.ru/hovanov-012005.html»

- stay on top of the latest security threats — with new attacks coming on the scene every day, a person could become vulnerable even if nothing has changed since his/her last assessment!;
- make sure that employer's staff is being vigilant by maintaining a focus on IT security;
- increase awareness and understanding of security issues throughout one's company;
- make smart security investments by prioritizing and focusing on the high-importance, high-payoff items;
- demonstrate to a person's customers that security is important to him/her — this shows them that you care about them and their data.

The periodic information security assessments is very important and therefore, inspectors who come to organizations for revision and checking its activity including insurers who accepting to insure the object of information pay the great attention to periodic information security assessment.

US experts have created the recommendatory table for making periodic information security assessments which is provided below:

As we can see from the table, there are a lot of categories of information which should be revised for providing the security in recommended time period. If a director of middle class organization or first class company complies with the recommended assessments mentioned in the table above, he/she will pay cheaper for information risks insurance policy as well as it would be beneficial for Insurer too, because, if the IT system of Policyholder meeting such requirements it means that the likelihood for occurrence an insured case or event is very low.

As we know, in the changed competitive environment, the insurance companies' priority is to gain more control over final market, or lay hold of the relationship with the customer. It is fundamental, then, to recover (reuse) the relationships between insurer and policyholder. The growing competition in fact results in frequent reminders, and in continuous offers made to customers by the third party operators.

3.1-table

Table periodic information security assessments

Category	Audit Activity	Recommended Audit Frequency
Paths of Attack	Perform external vulnerability scan	Quarterly
	Perform external application penetration test	Annually
	Conduct analog line wardialing	Annually
	Validate web content filtering	Annually
Software Patch-Level and Use Compliance	Perform software inventory and patch comparison	Quarterly
	Review installed software and software license inventory	Annually
Network Security Architecture	Conduct rogue wireless access point scan	Quarterly
	Review firewall configuration review (includes reviewing ALL firewall rules)	Quarterly
	Evaluate internal network partitioning	Quarterly
	Capture and review raw packet	Annually
Infrastructure Best Practices Comparison	Conduct industry peer comparison	Annually
	Perform global IT architectural standards comparison	Annually
User Administrative Policy and Compliance	Perform social engineering study	Annually
	Conduct user tool usage and behavior vs. policy study	Annually
Encryption Usage and Key Handling	Review encryption policy compliance	Annually
	Review key revocation procedure	Annually
	Review key-store access management and inventory emergency key-store	Annually
Trust-Level Dependencies and Management	Review vendor and trusted partner access	Annually
	Validate external party access contracts and management approval for access	Annually
Virus Protection and Management	Inventory all systems vs. systems with current, active virus protection	Quarterly
	Confirm server and workstation virus signature updates	Quarterly
	Conduct email antivirus/anti-spam effectiveness stud	Quarterly
Role/Function Segmentation and Access Management	Review termination list vs. access removed, new hires vs. access granted	Annually
	Validate role separation for account provisioning function	Annually
	Review elevated privilege accounts	Quarterly
	Review use of shared accounts (Administrator, root, Oracle)	Quarterly
	Validate demotion/management of production data sets process	Annually
Password Policy and Use	Conduct brute-force password cracking	Quarterly
	Evaluate password strength policy	Annually

Source: Web-site Applied trust, available on: «https://www.appliedtrust.com/sites/default/files/assets/resources/the-importance-of-periodic-security-assessments.pdf».[45]

[45] «The importance of periodic security assessments» 2008, available on: «https://www.appliedtrust.com/sites/default/files/assets/resources/the-importance-of-periodic-security-assessments.pdf»

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In this new scenario, the only way to keep customers is to offer quality services, creating differentiating elements of their proposals, adding customization and consulting. The policyholders, after all, have the insurance and financial solutions tailored to their specific needs and they are not exploiting pre-standard packages. As it was discussed above, the insurance market is dynamic and evolving. This trend is driven by the customers' change. The analysis of the customer satisfaction outweighs more.

For example, in Russian Federation the range of research work on the analysis of the problem of insurance in the sphere of ICT, the study of the local and foreign insurance markets information systems, resources and technologies, the development of legal, regulatory and institutional framework of the system of insurance risks was carried out under the coordinating role of the Ministry of communications of Russia during 1996 – 1999. In the execution of research projects were developed 5 basic legal documents such as:

1. Concept of insurance risks.
2. Regulations on insurance risks.
3. Insurance regulations (information risk) information systems, information resources, hardware and software of computer facilities and office equipment of enterprises, organizations, institutions and citizens.
4. The methodology for assessing the value of information systems, resources, software and hardware as insured object.
5. Instructions on the examination of information systems, technologies, software resources, hardware and software of computer engineering at the conclusion of the insurance contract and the insured accident.
6. Recommendations on insurance risks.

As we can see, the developed legal documents and tactics of Uzbekistan are very similar with the Russian's especially in the sphere of insurance information risks insurance. Moreover, in Russian Federation were prepared proposals on amending the Federal law «On information, informatization and information security» in relation to insurance of information systems, resources and technologies.

In the law it is proposed to make an article with the following content:

Article 22. Insurance information resources, systems, technologies and facilities.

1. State information resources, systems, technologies and means for their provisions are the subject to obligatory insurance. The procedure and conditions of insurance are determined by the legislation of the Russian Federation.

2. Private information resources, systems, technologies and means for their provision should be insured in the procedure determined by the legislation of the Russian Federation.

In the development of these legal documents was attended by specialists of all Russian scientific research Institute of computer technology problems and information, Special design Bureau of computer-projecting, Scientific methodical center «Saturn», the Centre for independent comprehensive examination and certification, the Association of Russian banks and etc[46].

These works aimed at creation of a system of insurance risks.

Insurance risks – organizational structure representing a set of business entities (insurance companies, policyholders, expert, consulting and brokerage company), complex legislative and regulatory documents defining the scope of the system and the interaction between these organizations, and a set of guidance documents that define the terms and procedure of insurance.

It is not a secret that, in some cases Russian Federation is one step ahead from Uzbekistan but despite this, it is fact that the most methods in the sphere of legal support are very common. For example, according to № 250th Resolution of the Cabinet of Ministers of the Republic of Uzbekistan there were developed two centers such as Center of e-government development and Center of providing information security and by considering that the information risks insurance is more related to information security, we can analyze the activity of Information security center. According to Section 3 of the 250th Resolution of Cabinet of Ministers of Uzbekistan, there were identified the main tasks of the Center for

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[46] V.N. Hovanov and V.A. Konyavsky «Information risks insurance and information security» Moscow 2007, date of access: 11 February 2015, E-source: «http://okbsapr.ru/index_hovanov.html»

information security under the State Committee for communication, informatization and telecommunication technologies of the Republic of Uzbekistan (Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan) such as:

- providing information security systems with the information systems, resources and databases of the «Electronic Government»;
- attestation of information objects within the implementation of the «Electronic Government» in accordance with applicable law;
- assist in the development and implementation of information security policy information systems and resources of state bodies;
- collection, analysis and storage of data on contemporary threats to information security, development of recommendations and suggestions for effective decision-organizational and program-technical solutions ensuring the prevention of acts of unlawful intrusion into information systems, resources, and database system «Electronic Government»;
- according to set procedures, providing statistical data on the results of monitoring of information security of governmental information systems and resources to the State Committee for communication, informatization and telecommunication technologies of the Republic of Uzbekistan (Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan);
- development of proposals to improve the regulatory framework in the field of information security information system resources and database system «Electronic Government», as well as the national segment of the Internet;
- interaction with operators and providers of telecommunications networks, organization of joint work and coordination of activities of state bodies on the prevention of crime in the use of computer and information technology;
- timely notification of national Internet users about emerging threats to information security in the national segment of the Internet, as well as consulting services for the protection of information;

- interaction with law enforcement agencies in the analysis, identification of offenders, methods and tools used in carrying out illegal or destructive actions in the information space;
- development of proposals to improve the regulatory framework in the field of information security information system resources and information technologies resourses;
- development of international cooperation in the field of information security in order to organize practical cooperation in the suppression of the information security incidents in the national segment of the Internet[47].

By considering security issues, «ALSKOM» is going to explain to employers, owners of Uzbek business people, shareholders of the Banks and different companies/organizations that, information should be secured not only by undertaking traditional technical methods but also by insuring it. From my point of view, implementing insurance under the conception of security can be very effective way for providing information security and for information risks insurance in the sphere of information communication technologies. Moreover, as far as I am concerned, the modern lifestyle itself requires us to undertake such measures, otherwise if the information is disclosed, it can be the result for different losses including financial and moral.

2. The staff training in economic risks insurance

As we know and as was mentioned by Islam Karimov at the meeting of the Cabinet of Ministers dedicated to the socio-economic development in 2014 and the most important priorities of economic program for 2015, together with Korean partners was formed INHA University in Tashkent, which according to international standards will be provided to train highly qualified specialists in the field of information and communication technologies, especially experts in

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[47] Article 3 of 250th Resolution of the Cabinet of Ministers of the Republic of Uzbekistan, also available on: «http://lex.uz/pages/getpage.aspx?lact_id=2237921»

software development, management information systems and computer networks. Furthermore, in the previous year was introduced an improved system of admission to higher education institutions to include substantive blocks of tests on computer and ICT issues, increased intensities estimates for core subjects, which allowed universities to select the most prepared students for the particular professions chosen by them. Therefore, Ministry of Economy, Ministry of Labor and Social Protection of Population, by involving all stakeholders should develop new Qualifier key positions and professions. Exactly this qualifier should be the guidance for professional training (employees and employers) of the new formation. Obviously, the knowledge and ability of future employees and employers in the sphere of ICT will have the significant place in this qualifier.

Moreover, in sixth part of the report, the President noted that, it is impossible to achieve the structural transformation of the economy without creating infrastructure of primarily information and communication systems, traffic (tracks, e-traffic lights, asphalting and etc.) engineering and communications construction. Particular attention should be paid to the implementation of the Complex Program of development of national information and communication system of the Republic of Uzbekistan for the period 2013-2020 years. Besides, Uzbekistan should continue work on the further increasing of the technical capabilities of the Internet access, the expansion of optical broadband access networks and the construction of fiber-optic communication lines, to complete the transfer of all regions, including remote areas, to digital television[48]. All of these, mean that the government of Uzbekistan pays significant attention on staff training especially for their knowledge in the sphere of ICT and of course it follows to information risks insurance is also included to this sphere. As we know, the role of staff in the development of any activity is very important, therefore the staff should regularly be trained. Besides, the insurance activity is included to business sphere and it

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[48] Report of the President of Uzbekistan Islam Karimov at the meeting of the Cabinet of Ministers dedicated to the socio-economic development in 2014 and the most important priorities of economic program for 2015. Narodnoe Slovo 17 January 2015 № 11 (6164) 2-3. Also available on: www.narodnoeslovo.uz

means that the employees of insurance companies mostly work with the customers/clients. Obviously, working with clients is the very delicate matter and therefore, employees should have knowledge not only in the sphere of insurance industry but also in communication skills and in ALSKOM such skills call «Insurance culture». In order to develop employee's skills in ALSKOM were developed common principles related to insurance culture. In the company, the complex of these principles was approved in one document and was distributed to all local and regional branches and departments across the Republic of Uzbekistan which working with clients and from the viewpoint of executive body of the company all of the staff who work in ALSKOM should know about their duties related to insurance culture. This document was approved in November 2013 and consists of three parts and below will be described the rules and obligations of staff which were indicated in these parts:

Part one – Common requirements set for the staff of company

Firstly, each employee of the company should organize his/her plan for the particular day before beginning of work hours.

Each employee should to show his/her cultural attitude to his/her work, including:

→ *pay attention to the appearance;*

→ *clothing must comply with the requirements of the office;*

→ *during the conversation with the staff, to clearly express his/her opinions;*

→ *strongly pay attention to culture of communication;*

→ *within his/her competence to ensure all of the tasks on time.*

At the end of working day, to store all of the documents related to company in the appropriate cells.

To provide the confidentiality in relation secret information of the company.

To be on time at the next working day.

Part two – Insurance culture in relation to serving the client

During the conversations with clients, the staff of ALSKOM should:

→ converse politely and frankly;

→ thoroughly intrigue client to buy the insurance product;

→ ethically communicate with client despite on his/her nationality, financial status and etc. (no discrimination);

→ communicate in language which is understandable for client.

In concluding the insurance contract staff should comply with the followings:

→ to monitor an object of insurance in comfortable conditions and time for client;

→ to conclude insurance contract in accordance with set rules by ALSKOM also taking into account the offers of client;

→ timely to transfer the money obtained in the result of calculated insurance premium to bank account of company;

→ to ensure that client does not have some misunderstandings in relation to insurance contract and calculated sums;

→ to make sure that all of documents which should be appendixes of insurance contract are available.

The most striking feature of this document that it was distributed to all branches and departments of the company with the requirement that staff should hang it on the wall which is visional for clients and at the end of this banner the inscription that: «Dear clients, if you discover non-compilation with the mentioned rules by our staff please inform us!» and there is the telephone number of head office which is located in the capital. Moreover, in sixth part of the report, the President noted that, it is impossible to achieve the structural transformation of the economy without creating infrastructure of primarily information and communication systems, traffic (tracks, e-traffic lights, asphalting and etc.) engineering and communications construction. Particular attention should be paid to the implementation of the Complex Program of development of national information and communication system of the Republic of Uzbekistan for the period 2013-2020 years. Besides, Uzbekistan should continue work on the further increasing of the technical capabilities of the Internet access, the expansion of optical broadband access networks and the construction of fiber-optic communication lines, to complete the transfer of all regions. All of these mean the government of Uzbekistan pays significant attention on staff training especially for their knowledge in the sphere of ICT and of course it follows to information risks insurance is also included to this sphere. In my opinion to making such actions, mean that company strongly pays attention on staff and its clients, because when employee knows that executive body of company informed about each his/her steps, employee begins to work carefully, responsibly and properly which the basics of development insurance services including information risks insurance. The implementation of such rules and principles are one of the basic factors providing labor discipline and the discipline is the promise of business development. As we know when employer provides the discipline in the company, the staff will start to operate more effectively in their directions including insurance in the sphere of information risks. It is true that today in the sphere of ICT there is enough amount of employee but in information risks insurance sphere there is a lack of worthy employee, because such profession requires not only employee who has a lot of knowledge in ICT, but also employee has to know handle documents, implement new offers, develop exist conditions, solve the problems and most important to check the actions in information risks insurance to accordance with the applicable legislations of the Republic of Uzbekistan. In other words, the worthy staff in information risks insurance has to delicately delve into ICT and documentary office work. Considering that information risks insurance is the new sphere and direction, the employee who realizes and offers this type of insurance also should be qualified by modern standards.

Measuring the effectiveness of selected controls allows managers, employers and staff to determine the extent to which selected control equipment can contribute to the achievement of planned management purposes.

As mentioned above, today the government of Uzbekistan implements absolutely new sphere which is information security system as well as there were published different legal documents regulation of the present sphere. For instance, 4th part of the Governmental Standard of Uzbekistan on the Methods for providing security of information security management system, discusses engineering and management of information security management system (ISMS) and according to this part, for proper implementation and functionality of ISMS the organization must develop and implement a program of training and staff development organization[49].

The present subpart also links to subpart № 5.2.2 «Training, awareness and qualification of personnel» which clearly states:

The organization should provide the necessary training for the staff that is responsible for completing specific tasks ISMS by:

a) determining the required level of knowledge and skills for staff, performing work affecting the ISMS;

b) organizing different staff trainings and other measures (e.g. hiring competent professionals) to meet these needs;

c) evaluating the effectiveness of undertaken measures;

d) maintaining records of education, training, skills, experience and qualifications (links to subpart №: 4.3.3 Records management).

The organization should also ensure that all employees significance and importance of their activities in the sphere of information security and its role in

[49] Subpart 4.2.2, Governmental Standard of Uzbekistan, Methods for providing security of information security management system, №:O‘z DSt ISO/IEC 27001:2009, Uzbek Agency for Standardization, Metrology and Certification 7

achieving the objectives of the ISMS[50]. I think that, an employee who enjoys with the capabilities and conforms to the requirements stated above will be able to quietly implement information risks insurance. In other words, the organization must follow the procedures of monitoring and analysis, and use the other controls to ensure that employers or management body will be able to monitor the performance of labor duties by the staff ISMS, as well as the current condition of information security. We found out that in the providing information security, the role of staff is significant and therefore, the present legal document includes the Policy of security in its Appendix A and in accordance with the A.8 of this Appendix an employer of any organization or company strongly must ensure that staff, subcontractors and third-party users understand their responsibilities and comply with their job and reduce the risk of disorders associated with the human factor: theft, fraud, theft or misuse of information processing facilities before hiring them to work (Prior to employment)[51]. As discussed above, before the concluding of the insurance contract on the information risks insurance, expert group of Insurer (ALSKOM) analyzes the condition of information security in the company of client and in this procedure will be analyzed the relationship and readiness of staff for security of information. It turned out that, the present governmental standard of Uzbekistan also identifies the rules of employers for hiring staff to company and at the same time to care about information security of his/her organization. Moreover, the present legal document determines other instructions for employers stipulating the rules for hiring to work such as, pay attention to the biography, history, political views even character of staff during the job interviews.

As for the staff training in information risks insurance this procedure is almost the same with the staff training in information security sphere. In this case, Uzbek

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[50] Subpart 5.2.2, Governmental Standard of Uzbekistan, Methods for providing security of information security management system, №:O‘z DSt ISO/IEC 27001:2009, Uzbek Agency for Standardization, Metrology and Certification 11

[51] Appendix A-the purposes and tools of management, point A.8.1, Governmental Standard of Uzbekistan, Methods for providing security of information security management system, №:O‘z DSt ISO/IEC 27001:2009, Uzbek Agency for Standardization, Metrology and Certification, 18

Agency for Standardization, Metrology and Certification developed another Governmental Standard of Uzbekistan calling «Methods for providing security – Practical rules for information security management» and Article 6.1.2 Coordination of information security issues strongly stipulates the following content:

Tools of management

Heads of various departments of the organization concerned should coordinate the implementation issues of measures for information security management.

Implementation Guide

As a rule, the coordination of information security issues should include interaction and collaboration management, users, administrators, application developers, auditors and staff security, as well as specialists with skills in areas such as insurance, legal, personnel work, IT management or risk management. In the course of this activity the related department of organization should:

a) ensure that the security measures are implemented in accordance with the information security policy;

b) identify ways of handling cases of incompatibility;

c) approve the methodology and processes of information security, such as risk identification, classification of information;

d) identify significant changes and threats are times when the information and means of processing are subjected to threats;

e) evaluate the adequacy of the implementation and coordination of information security management tools;

f) effectively support learning across the organization, training and awareness in the field of information security;

g) analyze the information obtained from the identification and treatment of security incidents, and to recommend suitable measures in response to the established information security incidents.

If one's organization is assigned a separate governing board, for example, due to a mismatch organization size, the above steps should be taken to another governing body or individual managers. In any case, during the researching the Uzbek legislation I found out that, any issue related to information security including information risks insurance, any problem should be solved by a person (employee/employer) who has appropriate qualification and passed attestation[52]. As mentioned above, if the staff works in the sphere of information security for about 1 or 2 years, he/she should be attested and qualified in the related commissions and staff development centers developed by the government of Uzbekistan.

CONCLUSION TO THE THIRD PART

In the third part, paper has discussed and examined the effective ways for information risks insurance in the sphere of ICT as well as the staff training in information risks insurance. In conclusion I would like to say that, during the researches it turned out the sphere of ICT is very large and each object and subject has own role in its development. The third part states that, due to the huge sphere of ICT, there are a lot of elements and directions which should be developed. It is difficult to determine the effective ways for information risks insurance when there are so much undeveloped spheres. Besides, there are a lot of alternatives for information risks insurance because, for example when the amount of accurate information belongs to Bank, Insurer can insure it as bank risks insurance or information risks insurance and in any way it depends on the Policyholder. Today the sphere of ICT is developing significantly and proportionally, the types of risks are becoming more too, therefore, insurance system needs the qualified (regularly) staff and professionals in order to be on track with the development of ICT.

[52] Article 6.1.2, Governmental Standard of Uzbekistan Methods for providing security – Practical rules for information security management, №:O‘z DSt ISO/IEC 27002:2008, Uzbek Agency for Standardization, Metrology and Certification 10-11

Basically, third part analyzed the ways for effective insurance risks insurance, how to prepare the staff in order to meet the common requirements related to insurance and ICT spheres as well as the legal support for realization of mentioned actions. The paper says that, if an owner of information and the staff of insurance company comply with the stated instructions the most important thing which is information will be properly secured.

CONCLUSION

The main reason of the present dissertation is to describe the management of economic risks in the insurance sphere, on the example of «ALSKOM» insurance company and as already was mentioned under the economic risk the paper discusses information risks. It is fact that today information technology plays the significant role in our life and if a person is not in the field of ICT him/herself, he/she might not know just how information technology impacts on his/her life. Therefore, we cannot refuse the fact and impact of ICT on our life, but where development, there is a risk. Considering this fact the present dissertation was dedicated to analyze the information risks in the sphere of ICT and thereby to examine the effective ways for preventing or avoiding from risks. Today, the world recognizes new problem which information's cost, because information communication system is one direction but the information itself is another direction and it can be priceless or expensive for the particular part of people when for another part of people this information is worthless and valueless. An estimation of ICT is easy in comparison with the information that is almost any employee who works in IT department can estimate the approximate value of information communication technologies but the information which contains ICT is another direction. Therefore, today the governments of different developed countries including Uzbekistan with their legislative bodies implementing legal documents in order to properly assess the information. As the recommendations I would like to say the followings:

1. In order to effectively manage the economic risks, one should to deliver the notion and importance of the particular risks to society.
2. When the society indeed understand the importance of risks including information risks, the governmental body can offer the ways for avoiding from these risks (by implementing legal documents or conducting different forums).
3. As the one of the methods for regulating these risks, will be accepted the information risks insurance and the governmental body can to make it as obligatory insurance.
4. In this stage there will appear the insurance companies by offering their information risks insurance as the method for providing information security.

5. Thereby the legal documents regulating the information risks insurance should be regularly developing in order to be one currency with the modern regulations.

6. The last recommendation is based on modern requirements, that is the potentially registration of the type of insurance. This issue is not discussed above and it is considered informally as fresh problem for any inventors. Today we can observe how information, including ideas, becomes popular in short period of time. This factor allows others to steal the information or idea including the new types of insurance. Besides, the information risks insurance is very new type of insurance and is not practiced by insurance companies much yet. Therefore it is considered as recommendation to potentially protect the type of insurance in order to prevent the use of this by other companies illegally. In general words, other insurance companies can use and serve the information risks only e.g. on the base of agreement with ALSKOM.

Furthermore, in conclusion I would like to say that safety first and other issues are the second level problems, therefore, we should firstly care about security. I think the present dissertation shortly discussed about the ways of providing information security and in my opinion we should culturally aware that the human factor is the basic source of most disasters including appearance of information risks. Companies and organization should deliver to their staff that the information which is available for them not for sharing or stealing but source of organization’s development as well as their activity.

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APPENDIX 1

МИНИСТЕРСТВО ФИНАНСОВ РЕСПУБЛИКИ УЗБЕКИСТАН

ЛИЦЕНЗИЯ

Серия СФ

на осуществление страховой деятельности страховщиков и страховых брокеров

№ 00194

В соответствии с приказом Министерства финансов Республики Узбекистан от "22" ноября 2007 г. №15-СФ / 09 января 2012 г. 2-сф настоящей лицензией Акционерному обществу страховой компании «ALSKOM»
(полное наименование владельца лицензии)

разрешается осуществление **добровольного и обязательного** страхования в отрасли общего страхования по следующим классам:
(разрешенный вид деятельности)

Класс 1 – Страхование от несчастных случаев;
Класс 2 – Страхование на случай болезни;
Класс 3 – Страхование наземных транспортных средств;
Класс 5 – Авиационное страхование;
Класс 7 – Страхование имущества, находящегося в пути;
Класс 8 – Страхование имущества от огня и стихийных бедствий;
Класс 9 – Страхование имущества от ущерба;
Класс 10 – Страхование автогражданской ответственности;
Класс 11 – Страхование ответственности в рамках авиационного страхования;
Класс 13 – Страхование общей гражданской ответственности;
Класс 14 – Страхование кредитов;
Класс 16 – Страхование от прочих финансовых рисков.

Местонахождение владельца лицензии (почтовый адрес): Республика Узбекистан, 100202, город Ташкент, Юнусабадский район, улица Амира Темура, дом 109

Идентификационный номер налогоплательщика владельца лицензии: 201941144

Дата выдачи лицензии: "25" июля 2014 г.
Срок действия лицензии неограничен
Порядковый номер по реестру: 188
Уполномоченное лицо: Б.М. Юсупов (Ф.И.О.) (подпись)

М.П.

Срок действия лицензии продлен до ________ г.
Приказ Министерства финансов Республики Узбекистан от "__" ______ 20__ г. №___
Уполномоченное лицо: ________ (Ф.И.О.) ________ (подпись)

М.П.

Срок действия лицензии продлен до ________ г.
Приказ Министерства финансов Республики Узбекистан от "__" ______ 20__ г. №___
Уполномоченное лицо: ________ (Ф.И.О.) ________ (подпись)

М.П.