FINANCIAL SECTOR ASSESSMENT PROGRAM

RUSSIAN FEDERATION

INSURANCE SECTOR

TECHNICAL NOTE

JULY 2016

This Technical Note was produced by Eugene Gurenko and Alma Qamo from the World Bank. It was prepared in the context of a joint World Bank-IMF Financial Sector Assessment Program mission in the Russian Federation during April, 2016, led by Aurora Ferrari, World Bank and Karl Habermeier, IMF, and overseen by Finance & Markets Global Practice, World Bank and the Monetary and Capital Markets Department, IMF. The note contains technical analysis and detailed information underpinning the FSAP assessment's findings and recommendations. Further information on the FSAP program can be found at www.worldbank.org/fsap.

THE WORLD BANK GROUP
FINANCE & MARKETS GLOBAL PRACTICE

CONTENTS

TABLES

FIGURES

Acronyms

ADR	Alternative dispute resolution
ALM	Asset liability matching
AML	Anti-money laundering
ARIA	All Russian Insurance Association
BAFIN	Federal Financial Supervisory Authority in Germany
BF	Bornhuetter-Ferguson
CBR	Central Bank of Russia
CDF	Claims development factor
CEO	Chief executive officer
CFO	Chief financial officer
CFT	Combating the financing of terrorism
CIO	Chief investment officer
CMTPL	Compulsory motor third party liability
CRO	Chief risk officer
Delegated Regulation	Delegated Regulation (EU 2015/35 of 10 October 2014)[1]
EIOPA	European Insurance and Occupational Pensions Authority
ERM	Enterprise risk management
EU	European Union
EU SI	EU Solvency 1
EU SII	EU Solvency 2
EWS	Early warning system
FFMSR	Federal Financial Markets Service of the Russian Federation
FMA	Financial Markets Authority in Austria
FSAP	Financial Sector Assessment Program
GDP	Gross domestic product
GWP	Gross written premiums
IAIS	Insurance Association of Insurance Supervisors
IBNR	Incurred but not reported
ICP	Insurance core principle
IFRS	International financial reporting standards
ILS	Insurance linked security
IMD	Insurance Market Department
Insurance Law	Law N 4015-1 "On the organization of insurance business in the Russian Federation"
IRB	Brazil Re (Instituto de Resseguros do Brasil)
IT	Information technology
MCR	Minimum capital requirement
MIS	Management Information System
MoCE	Margin over the current estimate
Motor CASCO	Voluntary own motor vehicle insurance

[1] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0035&from=EN

NMER	Net maximum event retention
NRC	National Reinsurance Company
NWP	Net written premiums
OECD	Organisation for Economic Cooperation and Development
ORSA	Own risk and solvency assessment
OSFI	Office of the Superintendent of Financial Institutions in Canada
PCR	Prescribed capital requirement
PLR	Premium leverage ratio
PML	Probable maximum loss
RBNS	Reported but not settled
RoE	Return on equity
RR	Receivables ratio
RUB	Russian Rouble
S&P	Standard & Poors
SCR	Solvency capital requirement
SMR	Solvency margin ratio
SRO	Self regulated organization
SUSEP	Superintendence of private Insurance in Brazil
ULR	Ultimate loss ratio
USD	American dollar
VAT	Value added tax

I. INTRODUCTION

1. This technical note covers the insurance sector supervised by the CBR. The analysis was carried out as part of the 2016 Financial Sector Assessment Program (FSAP) of the Russian Federation, and was based on the regulatory framework, supervisory practices and other conditions as they existed in March 2016. Relevant information including laws, by-laws and regulations as well as responses to a questionnaire sent out in advance were provided by the CBR before and during the mission.

2. The assessment has been supported by discussions with the CBR and the insurance market participants. The assessors are thankful for the full cooperation and support received from the CBR and the Russian insurance market in carrying out the assessment.

II. EXECUTIVE SUMMARY

3. With about RUB 988bn (USD 26bn) in gross premium written, in 2014, the Russian insurance industry ranked 27th in the world.[2] Non-life insurance premium accounted for 89 percent of GPW while life insurance for only 11 percent. The ratio of insurance assets to GDP amounted to 2 percent, which is far below the EU average of more than 50 percent. The insurance sector has shrunk in the past two years on account of several factors. In 2013-14, gross written premium in the non-life sector grew by only one percent in real terms, but declined by 12 percent in 2015 due to declining demand for voluntary insurance products in the context of deteriorating macroeconomic environment. The downgrade of Russia's sovereign rating from BBB- to BB+ with a negative outlook (S&P, 2015) reduced the ability of large Russian insurers to write inward foreign reinsurance business. With combined ratios close to 100 percent over the last five years, the non-life insurance sector realized only marginal profits which were mainly due to the investment income. The current macroeconomic conditions significantly reduce consumers' saving capacity and have an adverse impact on the development of life endowment products and credit life insurance which closely follows the downward trend in new loan originations in the banking sector at large due to the increasing inflation and bank interest rates.

4. Another factor that further undermined the profitability of the insurance industry in 2013-2015 has been the raising claims inflation in the MTPL segment of the market. The 2012 decision of the Supreme Court to extend consumer protection law to insurance claims enabled consumers to file insurance claims directly with the courts bypassing the insurance companies. In the absence of claims settlement guidelines for lower courts, this led to millions of arbitrarily high court awards to consumers. As a result, 2013-14, witnessed a major increase in MTPL claims although the situation considerably improved in 2015 due to some changes

[2] http://www.swissre.com/media/news_releases/Stronger_advanced_markets_performance_boosts_insurance_industry_growth_in_2014.html

introduced in the Insurance Law and the proactive stance taken by the All Russian Insurance Association on that issue with the government and the Supreme Court.

5. In 2015, the industry also faced with the consequences of the Western economic sanctions which effectively closed access to the high quality Western reinsurance capacity for the Russian insurers that provide coverage for 1500 large Russian companies that were put on the sanctions list. In the past, the Western reinsurers provided over 80 percent of reinsurance capacity for such risks. To address the problem, the government intends to establish a national reinsurance company (NRC) to be capitalized by the CBR, which will provide reinsurance capacity for large industrial and commercial risks emanating from these companies and will assume other difficult risks which are difficult to place in the commercial reinsurance markets (e.g. developers' third party liability). While understandable, this approach may not be the most effective solution to the problems created by the sanctions regime for the Russian insurance. International experience with national reinsurance companies has been by and large negative, as most of them have been eventually privatized at a considerable cost to the state. In addition, the creation of the NCR will also have adverse effects on the market competition and the long-term stability of the Russian insurance market as the company is likely to emerge as the largest reinsurance player in the Russian Federation not constrained by market competition or even regulatory requirements.

6. The further consolidation of the sector will lead to a better performing insurance market. Since 2013, when the CBR took over supervision of the sector, the industry has been under increasing pressure to increase its solvency capital and liquidity of assets, improve the quality of regulatory compliance, internal controls and financial management. These tightened regulatory requirements have led to a major industry consolidation. In 2015 alone, 70 insurers lost their licenses. The introduction of planned new regulatory requirements in 2017 – such as the IFRS-like accounting rules, including the system of IFRS internal financial accounts, and actuarial valuation of insurers' liabilities – is likely to reduce the number of companies even further. With the first 20 largest insurers already accounting for 77.5 percent of the gross written insurance premium in 2015, further consolidation is unlikely to have negative effects on market competition.

7. In the case of Russia, the main objective of insurance supervision is to ensure that insurers fully comply with core regulatory norms fixed by the law in the following four areas of insurance operations: (a) solvency (capital adequacy); (b) insurance reserves; (c) assets covering own funds; and (d) assets covering reserves. As a consequence, the main efforts of off-site and onsite supervision are focused on ensuring compliance of insurers with these four regulatory norms, which also determine the allocation of CBR regulatory resources.

8. The most profound implications of the current rule-based insurance supervision is a likely underestimation of the sector's solvency. Even though the CBR requires insurers to submit actuarial assessments of reserves as part of their regular reporting, such estimates play no role in determining companies' legal compliance with the insurance solvency requirement, which instead relies on a normative formula-driven assessment universally applied to all lines of insurance business regardless of insurers' size and claims performance record. Such an approach

may materially underestimate the real solvency of the sector. As of 2017, with the introduction of IFRS reporting standards companies will be required to present actuarial assessments of their reserves on their solvency reporting forms. However, it is still unclear whether these risk-based assessments of insurance liabilities will be fully reflected in the calculation of insurers' solvency ratio due to the lack of appropriate legislation.

9. While the dispersion of insurance supervisory functions among numerous CBR departments with various reporting lines carries certain advantages (such as a reduced potential for the conflict of interest), it also has a potential for major drawbacks. These include the (a) potential for insufficient coordination among different departments, (b) shortage of necessary insurance expertise within departments universally dealing with a wide range of financial services, and (c) impaired ability of the regulator as a whole to systematically detect problems with compliance in such a technically complex industry as insurance at an early stage. The rule-based supervisory framework and the current infrastructure do not fully support the implementation of the early warnings system which is designed to (a) detect and prevent negative solvency trends, (b) require insurers to take measures at an early stage of such negative trends and (c) report more frequently until the warning has been addressed.

10. Despite the negative macroeconomic outlook for 2016, due to the still very low personal insurance consumption ($179/per capita in 2014) and insurance premiums amounting only 1.4 percent of GDP, the Russian insurance industry is poised for further growth which can be encouraged by selected legislative and regulatory reforms. The most pressing issues to be addressed include but are not limited to: (a) introduction of actuarially set reserves for solvency assessment purposes and enhancing the role of supervision actuaries; (b) setting up an effective insurance supervision approach with automated data storing and processing capabilities that would ensure the optimization of contributions from all involved CBR departments; (c) development of an effective Early Warning System (EWS), with clearly set benchmarks to determine the topics and companies which require close attention; (d) introducing sound requirements on corporate governance and risk management; (e) developing sound CMTPL claims reserving standards as a prerequisite for the tariff liberalization; (f) introducing minimum requirements regarding the insurers' net retentions on per risk and aggregate level; (g) introducing agricultural insurance requirements for farmers receiving agricultural subsidies from the state; and (h) considering an alternative market-based approach to secure additional reinsurance capacity instead of creating a national reinsurer.

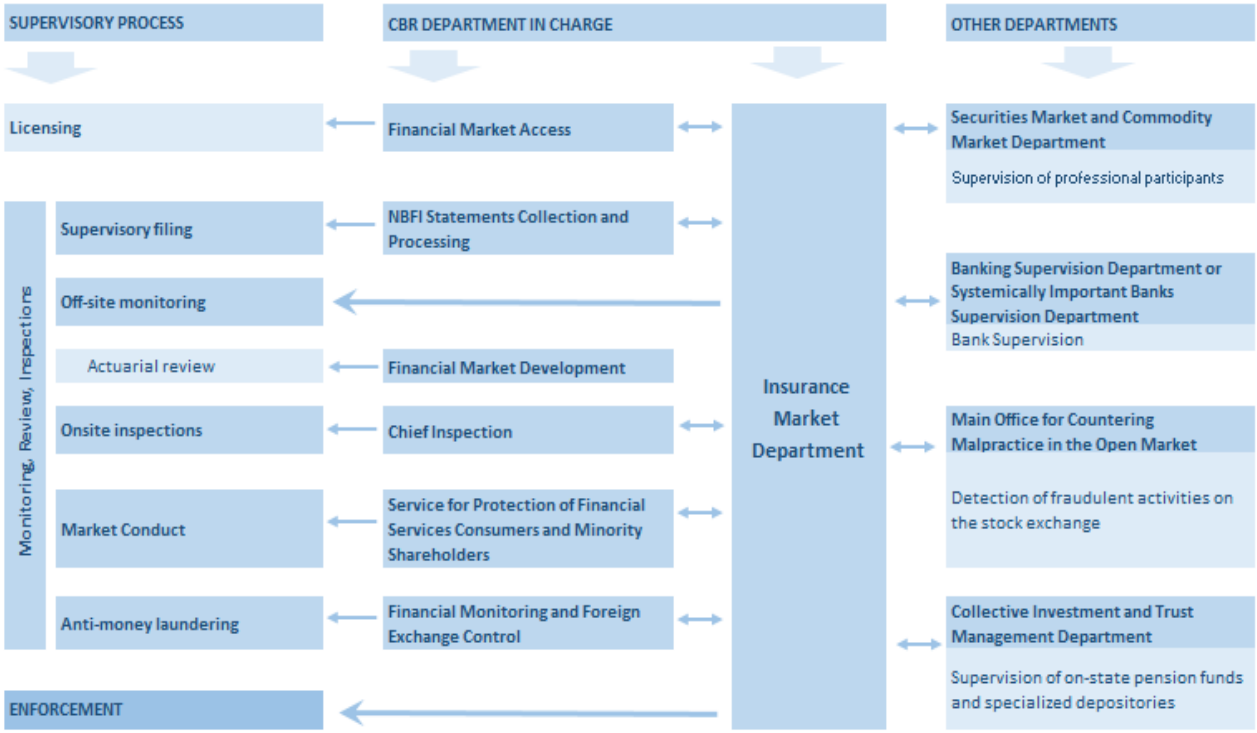
III. INSTITUTIONAL, REGULATORY AND MARKET STRUCTURE OVERVIEW

A. Institutional and Regulatory Overview

The Supervisor

11. The CBR as a mega regulator. From 2013 the Central Bank of the Russian Federation (CBR) has become the single mega regulator for both credit and non-credit financial institutions. In the case of insurance supervision, the CBR has fully assumed the functions of the national insurance supervisor from the now abolished Federal Financial Markets Service of Russia (FFMSR). With the transfer of insurance market oversight to the CBR the quality of insurance supervision has markedly improved. In only two years, the CBR has greatly contributed to the development of national professional insurance market, strengthened its capital base, brought about noticeable improvements in the market conduct and facilitated the much needed consolidation of the industry by withdrawing licenses of almost 200 non-performing companies.

Figure 1: CBR insurance supervision functions



Source: CBR

12. Several departments of CBR are responsible for insurance supervision. Departments involved in supervision include: (i) Financial Market Access Department (in charge of licensing and conducting the public register), (ii) Department of Non-bank Financial Institutions' Statements Collection and Processing (in charge of data collection); (iii) Financial Market Development (iv) Chief Inspection (in charge of onsite inspections for all financial institutions, including banks), (v) Department for Protection of Financial Services Consumers and Minority Shareholders (in charge of consumer protection), (vi) Financial Monitoring and Foreign Exchange Control (in charge of anti-money laundering), and (vii) Insurance Market Department (IMD) in charge of off-site monitoring of insurance market. The later acts as the core insurance supervision department which performs the overall market monitoring and coordinating role on all insurance supervision matters in cooperation with other CBR departments.

13. The IMD conducts its operations through its Headquarters in Moscow and three regional branches. The IMD currently employs 90 staff including 47 insurance experts and 32 curators with professional background in insurance acquired through either several years of work in insurance regulatory bodies, the insurance industry or insurance service companies (e.g. rating agencies or auditors). The IMD staff displays a high level of technical competence. However, the current organizational setup of insurance supervision does not fully provide for the efficient use of this expertise.

Supervision

14. The CBR applies a rule-based supervisory approach which enables it to assess whether insurers comply with the relevant legislation and rule-based regulatory requirements. Its primary concern is to ensure that insurers fully comply with core regulatory norms fixed by the law in the following four areas of insurance operations: (a) solvency (capital adequacy); (b) insurance reserves; (c) assets covering own funds; and (d) assets covering reserves by the means of off-site monitoring and on-site inspections of insurance operations.

15. To carry out market off-site monitoring and review, the CBR has established frequent (monthly, quarterly and annual) reporting requirements for all insurers. In accordance with the Insurance Law and the Law on Bankruptcy, insurers should submit information on their financial and solvency position comprising: balance sheet, profit and loss statement, cash-flow statement, structure of assets, a solvency report, as well as information on premiums and claims by lines of business and regions**.** In addition, the insurers are required to submit external audit reports and technical reserves certified by responsible actuaries on an annual basis. The reporting of financial statements is currently done based on the national accounting standards but as of January 2017 it is expected to be fully compliant with the IFRS. The off-site monitoring and review is carried out by the Insurance Market Department.

16. The on-site supervision operates as a separate function under the Chief Inspection Department which supervises the overall financial sector. The onsite inspections can be full-scale or thematic and initiated upon request from the IMD planned or unplanned basis. The onsite inspections mainly involve checking insurers' compliance with the supervisory (and legal) norms, which does not require specific insurance qualifications from the onsite inspection team.

17. To ensure the necessary level of supervision for systemically important insurers, the CBR has implemented a system of individual curators for the top 100 companies. The largest 22 companies, which have designated as systemically important, have been assigned individual curators, while those within the 21-100 group have one curator per two or three companies.

Licensing

18. The legislation sets out requirements and procedures with regards to licensing of insurance companies (Articles 25, 32 & 32.1 of the Insurance Law and Regulation of the CBR №3316-Y of July 10th, 2014) which is administered by the Financial Market Access

Department. The requirements consist of a) minimum capital amounts which were recently increased (see Table 1); b) the necessary list of documents required by the CBR from the applicant of the authorization; c) information on the source of capital invested by shareholders holding 10 percent or more of the shares of the prospective insurer, as well as d) criteria applying to supervisory board, executive management, accounting, internal audit and actuarial functions.

Table 1: Minimum capital requirements

Scope of insurance license	Amount in mm RUB
Health insurance	60
Non-life insurance	120
Life insurance	240
Accident and health insurance	240
Reinsurance	480

Source: Article 25 of the Insurance Law

19. There are no regulatory requirements for the applicant to submit a business plan describing products, distribution channels, projected business volumes and financial projections that reflect the projected risk profile of the business. The licensing decisions are based on the applicant's ability to meet the minimum capital requirements, requirements for the completeness of the list of documents concerned and educational qualifications for senior management, chief accountant, internal auditor (or the Head of the Internal Audit Department) and actuary required by the Insurance Law.

20. There are specific licensing criteria for insurance brokers, which require them only to have no criminal record, to have no administrative sanction in the form of disqualification, to have no fact of being an individual executive body in the financial company that has committed an infraction and for that CBR has withdrawn license from **and to have a minimum bank guarantee** or another document proving the fact that the broker maintains the minimum amount of own funds required by the Insurance Law**.** The regulation is however silent on the need for relevant insurance expertise or insurance experience as a pre-requisite for licensing. There are no licensing requirements for insurance agents.

Corporate governance and risk management

21. The current legislation has only generic corporate governance provisions, which establish the main objectives of the internal control systems to provide assurance for (a) effectiveness of insurance operations and risk management; (b) reliability of financial information; c) compliance with the laws and regulations; and (d) systems for detecting criminal activities including anti-money laundering and counter-terrorism financing.

22. The current legislation has limited suitability criteria for shareholders and Board members who are not required by law to comply with such essential requirements as reputation and professional competence. There are no specific legal requirements on the level of knowledge, skills and expertise at the Board level, which should be commensurate with the

governance structure and the nature, scale and complexity of the insurer's business, and remuneration policies and practices covering senior staff positions whose actions may have a material impact on the risk exposure of the insurer.

23. The Insurance Law requires identification, measurement and monitoring of risks through internal audit and actuarial functions which should assess (i) the company's performance, (ii) adequacy and efficiency of the internal control system, (iii) compliance with regulations and internal guidelines, (iv) adequacy of technical reserves and (v) irregularities. Based on legal requirements, audit reports have to present irregularities and violations and their estimated impact on the solvency margin, liquidity and other business performance.

24. The current rule-based regulation also does not provide for the use of (ORSA) own risk and solvency assessment to assess the adequacy of insurers' risk management, and current and likely future of their solvency position.

Capital adequacy

25. Capital adequacy requirements are by and large in line with the EU Solvency I framework and hence are not risk sensitive. The Insurance Law (Article 25) requires insurers to meet at all times the solvency requirements which are monitored by the CBR on a quarterly basis. The Insurance Law clearly, and in line with best international practices, specifies the types of assets which can be taken into account for the calculation of available capital. Insurers are required to calculate the normative solvency ratio as a ratio of available capital to the required solvency margin (EU S1 – like approach) and ensure that it does not fall below 1. Non-compliance with solvency and capital adequacy triggers a supervisory request for the plan of measures to restore own capital. Failure to comply with an order to increase capital gives grounds for the CBR to suspend and in some cases even revoke the insurer's license.

26. The mathematical reserve is calculated for each individual contract based on actuarial methods. Life insurance reserving regulation requires life insurers to use a maximum technical interest of 5 percent for the purpose of calculating their mathematical reserve, and makes allowance for guarantees offered through rather short-term life insurance contracts (mostly up to five years).

27. The capital adequacy of non-life insurers (and hence solvency) may be materially underestimated due to the rule-based calculation of the IBNR claims reserves based on the Bornhuetter-Ferguson method, which is universally applied to all lines of insurance business. The CBR has recently required insurers to carry out alternative actuarial calculations of their technical reserves. However, as of now the actuarial estimates of reserves are not taken into account in assessing insurers' capital adequacy.

28. The current regulation does not require insurers to have a reinsurance policy that would define the objectives of reinsurance arrangements in line with the company's risk appetite, risk concentrations and its net capacity for risk retention. There are no regulatory

requirements with regard to insurers' per-risk or aggregate net risk retentions relative to their net capacity.

29. The regulations spell out clear and strict requirements for the investment of insurers' assets, which absolve them from the need to have an explicit investment policy.

Anti-Money Laundering and Combating the Financing of Terrorism

30. The legislation clearly regulates (a) the operation of the AML/CFT system, (b) the list of entities subject to the AML/CFT legislation, which includes insurance entities and (b) their obligations. The CBR has a thorough and comprehensive understanding of the ML/FT risks and uses available information to assess the ML/FT risks to the insurance sector on a regular basis. The regulatory framework has been extensively amended to enhance the AML/CFT practices of insurers and insurance brokers.

B. Market Structure and Sector Performance

Insurance penetration

31. With insurance penetration of 1.4 percent of GDP and about USD 179 insurance consumption per capita, the Russian Federation lags far behind the OECD countries (Table 2).

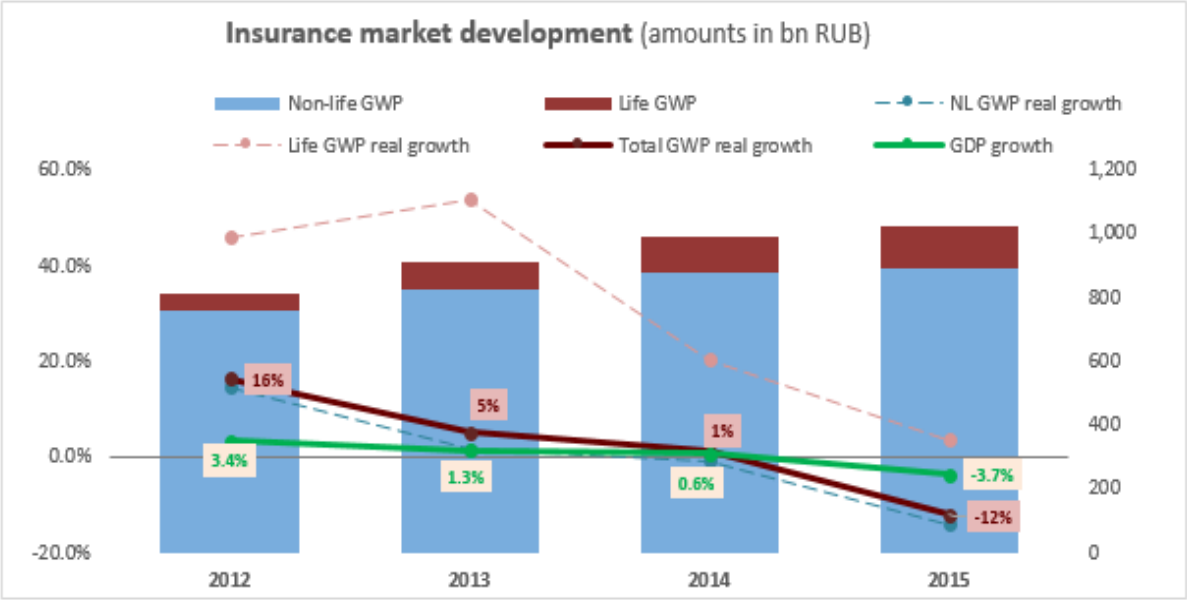
Table 2: Insurance penetration and density

YEAR	Insurance penetration (GWP as % of GDP)		Insurance density (GWP per capita in USD)	
	Russian Federation	OECD	Russian Federation	OECD
2011	1.2	8.7	159.2	3,294
2012	1.3	8.4	183.8	3,204
2013	1.4	8.3	198.7	3,148
2014	1.4	8.7	179.0	3,329

Source: CBR and OECD publications (https://stats.oecd.org)

32. The development and growth prospects of the insurance sector have been adversely affected by the macroeconomic environment, which has been steadily deteriorating. As a result, in 2014, the the gross written premium measured in local currency contracted by 1 percent in real terms compared to 2013, and further declined by 12 percent in 2015 (Figure 2). The insurance market is suffering from the adverse economic conditions and has contracted due to the reduced purchasing power of the population, falling demand for voluntary insurance products, the increasing price competition across all business lines, and the downgrade of Russia's sovereign rating from BBB- to BB+ with negative outlook (S&P, 2015), which reduced the ability of large Russian insurers to write inward foreign reinsurance business.

Figure 2: Macroeconomic impact on insurance development



Source: CBR, World Bank (http://data.worldbank.org/)

33. With about RUB 988bn (USD 26bn) in 2014, the Russian insurance industry ranked 27th in the world in terms of gross premiums written[3] of which 89 percent came from non-life and 11 percent life insurance. The ratio of insurance assets to GDP amounted to 1.4 percent, which is far below the 8.7 percent average ratio for the OECD countries or countries similar to Russia in terms of GDP per capita such as Poland (10 percent) and Estonia (10.6 percent).

Table 3: Insurance market size and structure

bn RUB	2011	2012	2013	2014
Gross written premium				
Non-life	634	759	823	879
Life	35	53	85	109
Total	**669**	**812**	**908**	**988**
GWP to GDP	*1.2%*	*1.3%*	*1.4%*	*1.4%*
Insurance assets				
Non-life	883	962	1,078	1,240
Life	83	109	143	200
Total	**965**	**1,070**	**1,221**	**1,440**
Insurance assets to GDP	*1.7%*	*1.7%*	*1.8%*	*2.0%*

Source: CBR

34. As shown in Table 4 below, in 2015 non-life insurance premiums recorded a slight nominal growth (3%) which was mainly due to the increase of the CMTPL statutory tariffs.

[3]http://www.swissre.com/media/news_releases/Stronger_advanced_markets_performance_boosts_insurance_industry_growth_in_2014.html

Other major insurance business lines such as motor CASCO, property, accident and health insurance contracted for the first time over the last five years.

Table 4: Non-life insurance premiums

bn RUB

#	Type of insurance	2010	2011	2012	2013	2014	2015	*2015/2014-1*
a	CMTPL	91.9	103.7	121.7	134.9	151.6	218.7	*44%*
b	CASCO Motor	139.3	165.3	196.1	213.3	219.4	187.2	*-15%*
c	Property	102.1	169.5	180.4	183.5	202.6	187.5	*-7%*
d	Liability	36.8	28.0	39.3	39.2	44.5	46.3	*4%*
e	Accident and Health	36.8	49.7	75.7	94.6	95.9	80.9	*-16%*
f	Other	26.4	117.4	145.5	157.4	165.5	171.0	*3%*
	Total	**433.3**	**633.7**	**758.7**	**822.9**	**879.4**	**891.6**	***3%***

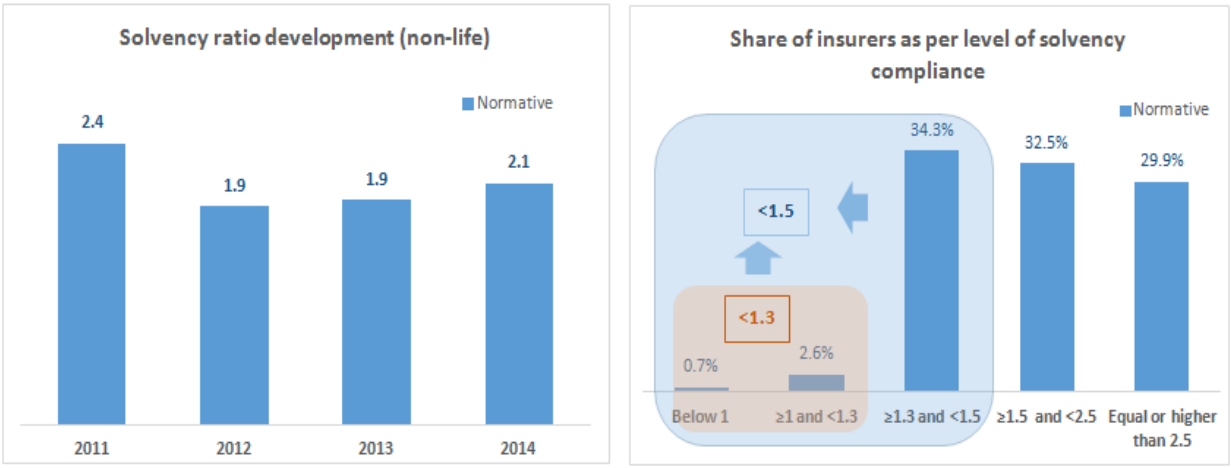
Source: CBR

Non-life solvency

35. Insurers are required to calculate the normative solvency ratio as a ratio of regulatory available solvency to the minimum required solvency margin (EU SI – like approach) and ensure that it does not fall below 1. Based on the current market data, the non-life insurance industry as a whole appears to comply with the normative solvency requirements. However, the normative solvency ratio a) has worsened from 2011 to 2014 for the market as a whole and b) has fallen below 1.54 for about 38 percent of non-life insurers in 2014 (Figure 3). The small share (3.3 percent) of insurers with normative solvency ratios below 1.3 (the point of supervisory intervention set by the Finance Directive 90N) is mainly due to the calculation of normative solvency ratios based on a relaxed (less prudent) version of EU Solvency (see paragraph 49).

[4] The ICPs note that it is useful to establish solvency control levels above the minimum solvency margin. A point of intervention at 1.5 times the minimum solvency margin level is a good practice adopted by various regulators. Maintaining a 150% solvency level might not only increase the chances of securing the ability to meet obligations but also the capacity to continue operating after an adverse event.

Figure 3: Non-life insurance solvency



Source: CBR

Non-life sector underwriting performance

36. In the last four years the non-life insurance sector recorded marginal profits, which were mainly due to investment returns rather than the core underwriting operations. As non-life insurers are expected to generate value added through insurance coverage rather than through asset management services, in a healthy insurance sector the combined ratio should generally be below 100 percent. However, this was not the case with the non-life insurance market in the Russian Federation where the combined ratios were consistently close to 100% during 2011-2014 and might be even higher in reality due to the potentially understated rule-based IBNR reserves used to calculate the claims ratios.

Table 5: Non-life insurance market profitability

In percent		2011	2012	2013	2014
Non-life insurance profitability ratios					
a	Net claims ratio	49.7	56.4	57.9	60.3
b	Expense ratio	49.6	41.9	41.2	37.6
c	**Combined ratio [c] = [a] + [b]**	**99.3**	**98.3**	**99.1**	**97.8**
d	Investment ratio	3.5	3.9	3.2	4.2
e	Operating ratio [e] = [c] - [d]	95.8	94.3	95.9	93.7
f	**Net profit ratio [f] = 1- [e]**	**4.2**	**5.7**	**4.1**	**6.3**

Source: CBR and assessors' calculations

CMTPL

37. The overall profitability of the non-life insurance sector has been reduced by the increases in the cost of insurance claims for all personal lines and particularly the compulsory CMTPL insurance. The CMTPL insurers are witnessing a significant increase in claims following a double digit inflation caused by the depreciation of national currency and the

resulting increases in the costs of imported vehicle spare parts. Based on the industry's feedback, the deteriorating technical results forced a number of insurers to reduce their CMTPL business in regions where claims ratios exceed 100 percent.

Agricultural insurance

38. Although agriculture is one of the four main contributors to the country's GDP, the agricultural insurance accounts only for less 2 percent of the non-life insurance premiums. Despite a major support from the government, which subsidizes about 50 percent of insurance premiums for a wide range of insurance coverages, only 15 percent of cultivated areas are currently insured. The demand for agricultural insurance will remain low for as long as in the aftermath of disasters causing loss of crops uninsured farmers are compensated by the federal budget at levels similar to those for uninsured.

Table 6: Agricultural insurance

bn RUB	2013	2014
Agricultural insurance		
Agricultural insurance GWP	14.3	16.7
Share to non-life GWP	1.74%	1.90%

Source: ARIA

Developer's liability insurance

39. Based on legal requirements (2012), all developers should conclude insurance against the liability to buyers for unfinished but prepaid construction projects. Rejected by professional insurers, this insurance coverage is provided by a specialized mutual insurer which was established in 2013 by the largest real estate developers in the country. Although the developers' insurance portfolio accounts for a very large and highly concentrated aggregate risk exposure (RUB 175bn /USD 2.8 bn), with less than USD 10 million in surplus capital, the mutual has no capacity to pay insured claims in case of any serious developers' defaults.

Life insurance

40. Life sector is under-developed and offers traditional insurance comprising mainly credit life insurance and, as of recently, individual endowment products (including with-profit participation contracts) which are rather short-term (3-7 years). Life insurers operate based on bank-assurance models (mostly within the same financial groups), which help them with making use of the branch networks, expertise and client bases developed by commercial banks. The recent macroeconomic conditions are reducing consumers' saving capacity with an adverse impact on life insurance growth (Table 7). Credit life insurance is directly affected by the declining trend in loan originations countrywide due to the increase in inflation and interest rates.

Table 7: Life insurance premiums

bn RUB

#	Type of insurance	2010	2011	2012	2013	2014	2015
	Life insurance						
a	Credit life and endowment	18.4	29.4	44.4	64.7	75.3	87.1
b	Annuity and pensions	4.3	5.6	8.5	20.2	33.6	42.6
	Total	**22.7**	**35.0**	**52.9**	**84.9**	**108.9**	**129.7**
	Annual growth rate	*N/A*	*54%*	*51%*	*61%*	*28%*	*19%*
	Underwriting commission rate	*N/A*	*N/A*	*42%*	*50%*	*38%*	*N/A*

Source: CBR

41. The life insurance premiums and benefits are tax deductible for individual consumers. However, the current tax regime does not encourage the development of employees' group life schemes, due to the taxation of employers' premium contributions. Life insurance companies pay out 40 to 50 percent of their annual premiums in commissions, which is considerable for a rather short term life insurance business.

Reinsurance

42. Western sanctions posed difficulties for domestic insurers with reinsuring risks of the state and Russian companies (over 1500 in total) which are facing Western sanctions with well rated US and EU reinsurers, which in the past assumed about 80 percent of such risks. A new draft law has been recently prepared for establishing a national reinsurance company (NRC) to be capitalized by the CBR. Based on the draft law, the national reinsurer will reinsure risks of companies which are facing sanctions, the Russian military and the state. To improve the overall risk profile of the NCR, the Russian insurers will be required to mandatorily place 10 percent of all reinsurance programs with the NRC. In addition, the NRC intends to provide reinsurance capacity to those insurers who provide third party liability coverage to residential developers that finance construction projects with advance deposits from future buyers of apartments.

43. The downgrade of Russia's sovereign rating to a BB+ (2015) has reduced the ability of large Russian reinsurers to write inward foreign reinsurance business. To address the problem, the reinsurers are seeking to further expand their operations in Asian countries and are considering to establish subsidiaries in the EU countries.

Industry consolidation

44. The number of insurance companies has been declining continuously. At the time of the FSAP in March 2015, there were 315 insurers operating in the market. Since 2013, when the CBR took over supervision of the sector, insurers have been under increasing pressure to increase its capital and liquidity of assets, improve the quality of regulatory compliance and financial management. Poor results in the CMTPL and the tightened regulatory requirements are driving the process of market consolidation further. As a result, in 2015 alone 70 insurers lost their

licenses. With the first 20 largest insurers already accounting for about 77 percent of the written gross insurance premium, further consolidation will have no negative effect on market competition.

Table 8: Number of insurance companies

	2010	2011	2012	2013	2014
Non-life					
Domestic capital	*482*	*416*	*313*	*290*	*278*
Foreign capital	*29*	*25*	*21*	*21*	*21*
Total non-life	**511**	**441**	**334**	**311**	**299**
Life					
Domestic capital	*41*	*35*	*28*	*28*	*29*
Foreign capital	*7*	*8*	*8*	*7*	*6*
Total life	**48**	**43**	**36**	**35**	**35**
Pure reinsurers	**23**	**18**	**15**	**13**	**13**
Mutuals	**7**	**7**	**11**	**12**	**12**
Total	**589**	**509**	**396**	**371**	**359**

Source: CBR

Industry concentration

45. The market concentration is ongoing with top insurers continuing to increase their market shares. In 2014, about 48 percent of the non-life insurance premiums were underwritten by five companies and 65 percent by ten companies out of 299 non-life insurers. About 57 percent of life insurance assets were owned by the top five companies out of 35 life insurers which operated in 2014. The concentration at the group level cannot be measured due to the lack of consolidated accounts, which will start to be reported by 2017 with the introduction of the IFRS accounting system.

Table 9: Insurance sector concentration

In percent	2011	2012	2013	2014
Non-Life GWP				
Top five (aggregate)	42	43	43	47
Top Ten (aggregate)	59	61	62	65
Life insurance assets				
Top five (aggregate)	52	44	49	57

Source: CBR

Role of associations

46. The All Russian Insurance Association (ARIA) is the biggest insurance association representing 160 out of the current 315 life and non-life insurers. The ARIA played an

instrumental role in addressing the issues relating to the increase in insurance fraud in the CMTPL during 2012-2014. By 2017, ARIA aims to bring together all other professional unions (including Motor Insurance Association and Agricultural Union) into a single organization with a view to effectively a) representing and protecting the industry's interests; b) actively contributing to sound market development; and c) introducing and safeguarding sound industry standards. The new legislation was recently approved with regards to the activities of actuarial self-regulated associations. However, due to the short term of its existence, it was not feasible to assess its impact on the development of actuarial standards for the industry.

IV. MAIN FINDINGS AND CHALLENGES

C. Regulatory and Supervisory Key Findings

Effectiveness of insurance supervision

47. While the dispersion of insurance supervisory functions among numerous CBR departments with various reporting lines carries certain advantages (such as a reduced potential for the conflict of interest), it also has a potential for major drawbacks. These include the (a) potential for insufficient coordination among different departments, (b) shortage of necessary insurance expertise within departments universally dealing with a wide range of financial services, and (c) impaired ability of the regulator as a whole to systematically detect problems with compliance in such a technically complex industry as insurance at an early stage. The ongoing consolidation of the industry (from 1,056 in 2005 to about 315 in 2016) accompanied by the growing professionalization of insurance companies, along with a strategic course taken by CBR toward risk-based supervision, dictate a new operational approach to the insurance supervision, which would require the CBR to (a) integrate its core supervision functions into a well-structured supervision process supported by a modern management information system and (b) strengthen technical capabilities and insurance qualifications of the insurance supervision staff working outside the IMD with a view to ensuring timely and effective reviews, input and decision-making from respective stakeholders involved in the insurance supervision process.

48. The CBR applies a rule-based supervisory approach which (a) does not adequately account for the proper identification and assessment of insurance risks and (b) does not allow to determine supervisory plans and priorities which take into account the nature, scale and complexity of insurers. The current monitoring system is not efficient in supporting the CBR efforts to timely detect, prevent and correct problems with the minimal impact on policyholders and shareholders.

49. Although the CBR has an electronic supervisory filing system in place to collect relevant financial and statistical information from insurers on a quarterly basis, until now the IMD staff has processed the information manually which is fraught with errors and significant delays and makes it difficult to validate insurers' assessments made by the supervisor. An IT project has been undertaken by the CBR to develop automated processing of

submitted information for the purpose of compiling timely and reliable supervisory reports on insurance companies.

50. The supervisory monitoring process consists of checking the compliance of insurers' financial parameters with the rules set by the Insurance Law and regulations on a) formulaic calculation of technical reserves, b) structure and quality of assets, c) surplus capital, and d) the minimum required solvency margin. The results of such an analysis based on manual data processing bear a high risk of errors. A system of financial ratios was introduced in January 2016. However, due to the absence of well-defined performance thresholds, it is not clear how it can be used for monitoring, and early warnings for internal risk rating purposes.

Solvency

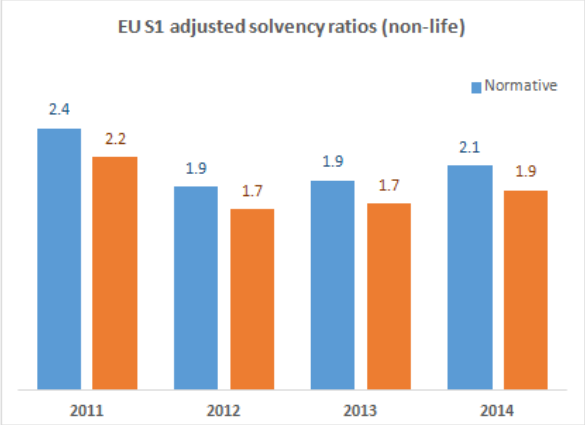
51. The normative solvency ratio calculated as a quotient of available solvency to the minimum solvency margin falls short of measuring insurer's real solvency position against the EU Solvency I standard due to the potential understatement of the components underlying the ratio:

a) While a rather relaxed version of the EU Solvency I is used to calculate insurers' *minimum required solvency margins*, this approach leads to results which are at least 12.5 percent lower than those calculated under the standard EU Solvency I approach for most non-life insurers (Figure 4a). Such a deviation from the EU Solvency standard is due to (i) the normative adjustment of standard EU coefficients used in premium and claims based methods from 0.18 and 0.26 to 0.16 and 0.23, respectively; and (ii) non-consideration of the EU Solvency I requirement specific to liability insurances (other than motor), which requires insurers to inflate respective premiums and claims by 50 percent for the purpose of minimum solvency margin calculations. As a result, if insurers were to measure their minimum solvency margins against the EU Solvency I standard, the market would look less solvent, with the group of weaker companies (with solvency ratios below 1.5) growing from 38 percent to 50 percent of the total number of non-life insurers. (Figure 4.b). The impact would be especially pronounced for the group of insurers with solvency ratios below 1.3 (current intervention threshold). As shown in Figure 4b, the share of such insurers would grow from 3.3 percent to 34.3 percent of the total number of non-life insurers when switching from the current normative approach to the standard EU Solvency I.

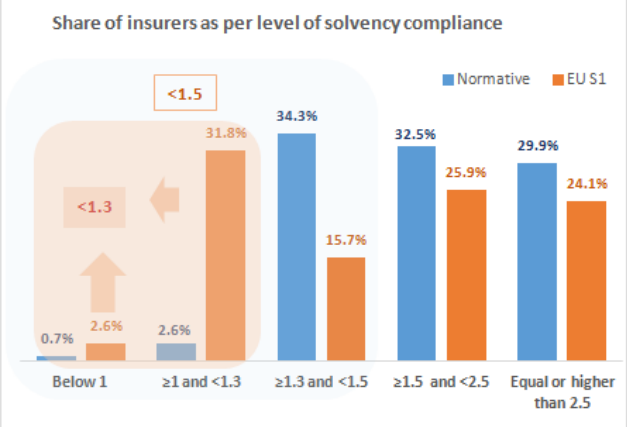
b) Non-life insurers' *available solvency* calculated as a difference between their regulatory assets and liabilities, may be further materially underestimated due to the universal approach to the calculation of the IBNR claims reserves for all lines of insurance business (Paragraphs 50 - 54).

Figure 4: Impact of normative coefficients to solvency ratios

a.



b.



Source: CBR and assessors' calculations

Claims reserving

52. Even though the CBR requires insurers to submit actuarial assessments of reserves as part of their regular reporting, such estimates play no role in determining companies' legal compliance with the insurance solvency requirement, which instead relies on a normative approach universally applied to all lines of insurance business regardless of insurers' size and claims performance record. Although the Bornhuetter–Ferguson (BF) method is widely used world-wide as a normalizing claims reserving approach, it does not fit well to all business lines, claims patterns and business sizes. The BF method would be more suitable for small and medium size insurers in the cases when a) the data is thin and volatile; b) lines of business have a long tail and c) areas where credible data is not available.

53. The outcomes of calculations under the BF method heavily depend on the assumptions relating to the a) claims development factor (CDF) and b) the a-priori ultimate loss ratio (ULR) for a given accident year. While the normative act defines the assumptions, their material deviation from the real claims patterns may lead to a major underestimation of the IBNR claims reserves and the overall ultimate claims amounts. As shown in Figure 5 below,

different assumptions used for claims development factors and ultimate loss ratios can lead to major deviations in the IBNR estimates.

Figure 5: BF method results' reliance upon static assumptions

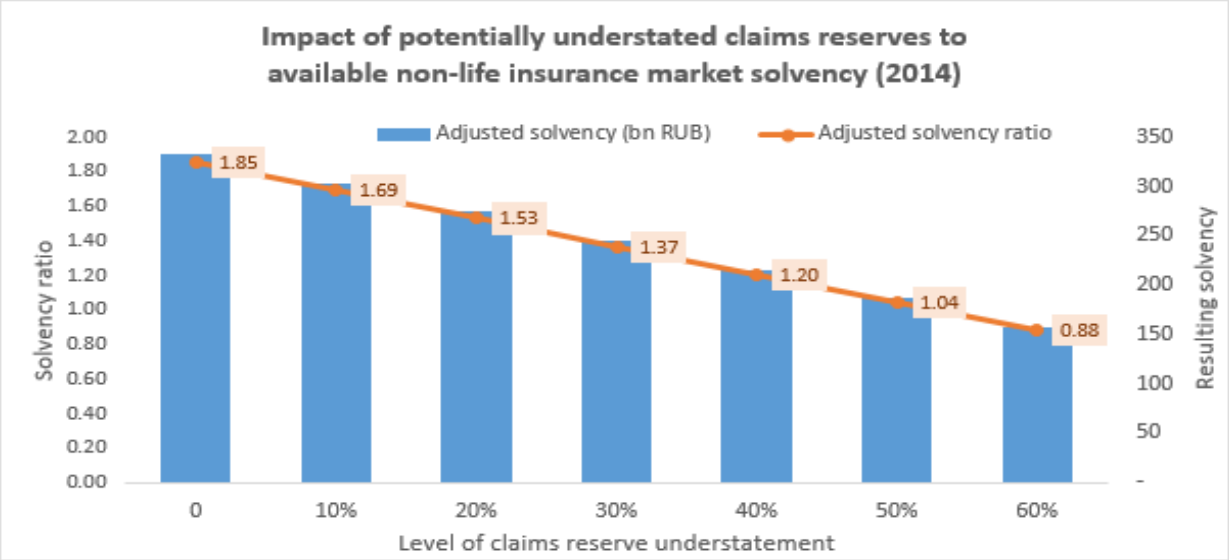
			Option 1	Option 2	Option 3
[a]	Earned Premium	DATA	10,000	10,000	10,000
[b]	Paid losses	DATA	6,000	6,000	6,000
[c]	CDF	ASSUMPTION	2.5	1.5	1.2
[d]	ULR	ASSUMPTION	70%	60%	60%
[e]	Expected loss	[e]=[a] x [d]	7,000	6,000	6,000
[f]	IBNR Factor	1-1/[c]	60.0%	33.3%	16.7%
[g]	**IBNR**	**[g]=[e] x [f]**	**4,200**	**2,000**	**1,000**
[h]	**Ultimate loss**	**[h]=[b] + [g]**	**10,200**	**8,000**	**7,000**

54. To summarize, the BF method may not be suitable for all business lines, claims patterns and companies. When the BF method is chosen to calculate the reserves, the actuaries of insurance companies should ascertain that the underlying assumptions (CDF and ULR) are selected by them in a conservative way on the basis of a thorough actuarial analysis.

55. Based on the normative act, insurers should calculate their future claims adjustment costs as three percent of their indemnity claims reserve. However, such a provision for costs is very small (especially for the CMTPL) when compared to the currently high claims adjustment expenses which include inflated lawyers' costs related to court cases.

56. While the impacts of under-reserving to insurers' solvency should be analyzed at the company level, Figure 6 below demonstrates an indicative correlation between the level of claims reserve underestimation and respective solvency ratios for 2014. Based on such a correlation, the real solvency ratio of the insurance market calculated based on the EU Solvency I approach would fall below 1.53 if reserves (including adjustment costs) were underestimated by more than 20 percent.

Figure 6: Impact of potentially understated reserves to solvency



Source: CBR and assessors calculations

57. As of 2017, with the introduction of IFRS reporting standards companies will be required to present actuarial assessments of their reserves on their solvency reporting forms. However, it needs to be ascertained that these risk-based assessments of insurance liabilities will be fully reflected in the calculation of insurers' solvency ratio.

Risk retention and reinsurance

58. The current regulation does not require insurers to have an annual reinsurance program that would define the objectives of reinsurance arrangements in line with the company's risk appetite, risk concentrations and its net capacity for risk retention.

59. There are no regulatory requirements with regard to insurers' per-risk or aggregate net risk retentions relative to their net capacity. Although major losses arising from catastrophic events may lead to numerous simultaneous insolvencies, there are no regulatory requirements to limit the insurers' own risk exposure to such catastrophic scenarios through a catastrophe reinsurance arrangement.

60. The regulation on the investment of assets covering technical reserves sets indirect restrictions on the credit quality of reinsurance counterparties. However, these are well below those required by best international supervision practices.

Insurance intermediaries

61. There are no requirements to intermediaries' professional qualifications, minimum professional training and competence or minimum third party liability insurance.

62. Insurance agents, who account for most of intermediaries operating in the insurance market, are not subject to the licensing requirements. Their suitability, professional training and market conduct are the responsibility of insurers.

63. Although insurance premium in Russia is not subject to either a VAT or sales tax, insurance brokerage commission is. The 18 percent VAT on the brokerage commission translates into the additional 1.5-2 percent markup on insurance premium, which seems to be inconsistent with the general spirit of the current insurance tax regime.

Prevention and enforcement

64. Due to the absence of a risk-based early warning system, the CBR does not have adequate capabilities to timely detect and prevent insurers' failures with the view to minimizing the impact on policyholders, creditors and shareholders.

65. The existing regulations on enforcement are incompatible with the IAIS ICP requirements for supervisory transparency and proportionality of supervisor's actions due to the lack of minimum statutory periods within which insurers should (a) restore their solvency; (b) comply with the supervisory data requests that fall beyond the scope of regulatory reporting. To ensure an equitable and fair treatment of insurers, the CBR should consider defining in statutory by-laws and regulations the minimum reasonable time allowed for insurers to implement corrective measures prescribed by the supervisor.

Corporate governance and risk management

66. One of the most notable gaps in the CBR's compliance with the IAIS ICPs is the lack of sufficient requirements on corporate governance. The current legislation sets only very general suitability criteria for shareholders and Board memberswithout further specifying essential requirements such as reputation, level of knowledge, skills and expertise at the Board level, which should be commensurate with the governance structure and the nature, scale and complexity of the insurer's business competence and capability of Board members. **.**

67. Due to the lack of specific legal requirements on corporate governance, the CBR does not have sufficient powers to require an insurer to demonstrate the adequacy and effectiveness of its corporate governance framework. As a result, currently insurers are not required to define the role of Board in the oversight of risk management policies including the responsibility for (a) the appointment, remuneration, authority, performance, assessment, and dismissal of the insurer's senior staff positions whose actions may have a material impact on the risk exposure and (b) implementation of clear policies, procedures and levels of authority for sound insurance operations.

68. Although the legislation defines general objectives of the internal control systems, there are no specific requirements to guide (a) the insurers in developing their internal control systems and (b) the CBR in assessing the adequacy of systems implemented by

insurers. Specifically, the insurers are not required to define control activities for the main activities, including (a) the underwriting policy in line with internal risk tolerance policies; (b) distribution channels; (c) claims management; (d) control of the reinsurance program; and (e) the adequacy of the IT systems. The law defines the roles and responsibilities of the internal audit. However such a key control function is yet to be driven by clear strategic plans and internal risk management criteria and procedures approved by the Board, with a view to ensuring a reasonably prudent approach to business with adequate control of all risks. Although the recent legislation has introduced the role of actuaries in insurance companies, the requirements limit their responsibility to calculating technical reserves and assessing the adequacy of assets covering them.

69. There are no oversight and accountability requirements for outsourced activities and the regulation does not require insurers to notify the CBR of any material outsourcing.

70. Due to the current rule-based supervisory regime, there are no requirements for enterprise risk management. The legislation does not define ERM requirements for quantification of risk under a sufficiently wide range of risk scenarios that require the use of complex simulation and modeling techniques to reflect the nature, scale and complexity of the risks that the insurer bears. The current rule-based regulation also does not provide for the use of (ORSA) own risk and solvency assessment to assess the adequacy of insurers' risk management, and the current and likely future of their solvency position.

Group supervision

With its establishment as a mega-regulator of the overall financial sector, the CBR has adopted a good practice of coordinated on-site inspections over individual companies of same financial groups, including insurers and banks. There are no legal restrictions for the CBR to coordinate its on-site inspections of the members of a financial group and take supervisory decisions for the inspected entities based on such inspections. During 2015 - 16, the Chief Inspection arranged coordinated inspections over 117 financial entities, including 14 insurers. However, the CBR is yet to introduce specific requirements for insurance supervision at the group level. With the introduction of the IFRS accounting standards in 2017, insurance groups will be required to report consolidated financial statements.

D. Market Key Findings

Financial strength

71. To determine the financial strength of the insurance sector in the Russian Federation we have analyzed three key ratios comprising the solvency margin ratio, leverage ratio and receivables ratio. The results are shown in Table 10 below.

Table 10: Key performance indicators

Key performance indicators In percent

Non-life	
1	Premium retention ratio (NPW/GPW)
2	Net claims ratio
3	Combined ratio
4	Receivables ratio (receivables/total assets)
5	Normative solvency ratio
5.1	*Largest five companies*
5.2	*Smallest five companies*
6	Premium leverage ratio (NPW/surplus capital)
7	Non-life technical reserves ratio (Technical reserves/NPW)
8	Number of insolvent companies
9	Market share of insolvent companies
Life	
1	Premium retention ratio (NPW/GPW)
2	Receivables ratio (receivables/total assets)
3	Normative solvency ratio
3.1	*Largest five companies*
3.2	*Smallest five companies*
4	Number of insolvent companies
5	Market share of insolvent companies

Source: CBR and assessors calculations

72. The normative solvency margin ratio (SMR) is defined as the quotient of total available surplus capital and the minimum solvency margin defined by the law. From 2011 to 2014, the normative solvency ratios declined from 243 percent to 209 percent for non-life insurance sector and from 381 percent to 201 percent for life insurance. The weakening of solvency can be explained by the negative or marginal profits realized by most of insurers (especially small and medium sized) over the last few years due to the formidable challenges discussed in the insurance market overview section.

73. The premium leverage ratio is the quotient of net premium written and available solvency. The PLR approximates the amount of non-life's insurer's available solvency to back every unit of retained premium (NWP is a measure of insurer's risk exposure). The higher is the premium leverage ratio, the less financially stable is the insurance industry. For non-life insurance portfolios consisting predominantly of non-volatile business lines, a PLR of 200 percent to 250 percent are generally viewed as robust. In 2014, the PLR ratio for the non-life insurance market was within the normal range also due to the inability of the market to materially grow the premium base.

74. The receivables ratio (RR), defined as a percentage of receivables to total assets, indicates the ability of insurers to collect insurance premiums on time. The higher is the RR,

the worse is the quality of the insurers' balance sheet. The receivable ratio has been consistently high for non-life insurance (from 20 percent in 2011 to 18.5 percent in 2014). Another test defined as a ratio of receivables to equity (available solvency), confirms a high level of the non-life sector receivables (above 60 percent of equity). The overdue receivables do not account for solvency calculations or assets covering the reserves, however the assessors did not receive the breakdown of receivables to carry out a more detailed analysis in this regard.

Life insurance

75. Due to the current unfavorable tax treatment of employers' contribution to corporate life insurance plans, group life remains nascent. Yet, in most countries group life accounts for the largest share of life insurance market and its growth.

76. Currently, due to the lack of appropriate legislation life insurers are unable to offer unit-linked endowment products, which restricts potential investment choices of insurance clients and consequently limits the growth prospects of the industry.

CMTPL

77. The current CMTPL insurance statutory tariffs are not actuarially set to reflect underlying risks and the real cost of claims. While insurers are only allowed to raise premiums within a narrow corridor, the tariffs were raised in early 2015 to reflect the legal changes in minimum statutory limits from RUB 160 thousand (USD 2,626) to RUB 500 thousand (USD 8,205). Although the change looks material in relative terms, the CMTPL statutory limits 'per se' remain a) very low when compared to other countries or EU minimum standards and as such, insufficient to properly compensate damages of rather expensive cars or major bodily injury claims.

78. In the absence of standard claims settlement guidelines, courts in several regions awarded arbitrarily high compensation to claimants represented by lawyers who retained considerable amounts out of the awarded compensation. In 2012-14, the CMTPL insurance market witnessed a major increase in insurance fraud in the MTPL. However the situation considerably improved in 2015 due to some amendments to the Insurance Law and the proactive stance taken by the ARIA on that issue.

Developers' insurance

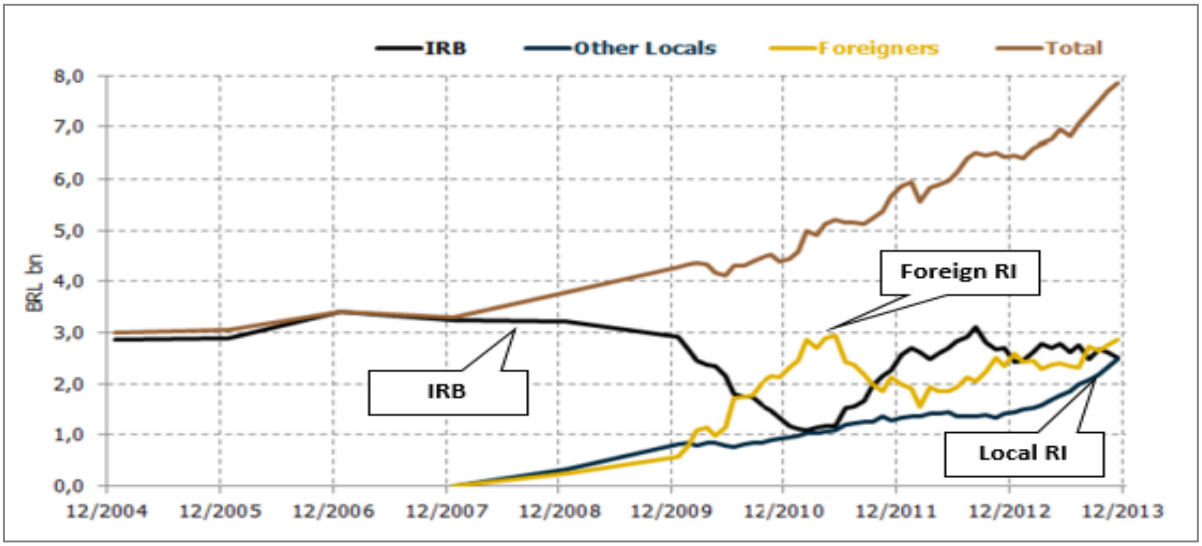
79. The risk of developers' default on its third party obligations represents a systemic (non-diversifiable and uninsurable) form of credit risk, which adversely affects the whole construction industry in times of economic downturns. Despite the existing legislative requirements to insure developers' liabilities to third parties and the creation of a specialized mutual insurer established by the largest property developers in the country, the risk of developers' liability to third parties for unfinished but prepaid construction projects in case of their default is still carried mainly by investors (buyers of apartments) and ultimately the state.

National Reinsurance Company

80. The experience shows that the establishment of national reinsurers, whether directly or in some way backed by the state, is a rather outdated business model. Such companies were initially introduced in the first half of 20th century to address the needs for capacity and development in the rather young and immature insurance markets. However, the growth of local insurance markets alongside the globalization of reinsurance industry challenged the very business rationale behind the existence of state-backed national reinsurers. In the past, state owned reinsurers were typically set up as highly inefficient government monopolies with the potential to create enormous liabilities for the state (outside the normal fiscal process). Brazil Re was one of such state-owned reinsurers.

a) Since its establishment (1939) and until 2007, the state-owned IRB-Brazil Re operated as the monopoly reinsurer in the local reinsurance market in Brazil with the 100% market share. In 2007, however, the domestic reinsurance market was opened for competition from other local and international players. Since its partial privatization in 2013, Brazil Re has been organized as a public private partnership between the state (represented by the federal government and the Bank of Brazil holding together 48 percent5) and private stakeholders.

Figure 7: Development of reinsurance premiums in Brazil



Source: SUSEP

b) With the opening of the reinsurance market in Brazil, the IRB market share declined sharply from 85 percent (in 2008) to about 25 percent (in 2011), with international reinsurers writing about 50 percent of the reinsurance business. However, as shown in Figure 7 above, after 2011 Brazil Re managed to regain a large market share only due to changes in the regulations, which restricted direct reinsurance cessions to the international reinsurance markets. While such changes were criticized by the international markets, several top international reinsurers

[5] http://www.bnamericas.com/en/news/insurance/tcu-approves-irb-brasil-resseguros-privatization1

addressed the issue through establishing their reinsurance subsidiaries in Brazil. The impact can be clearly seen at the end of 2013, when local private reinsurers altogether wrote the same share as the IRB (Figure 7).

c) With the growth and professionalization of the insurance market, Brazil Re's performance has been mainly a function of political decisions rather than the result of its business operations. While frequent changes in the regulation have helped Brasil Re to keep its leading position, these adversely impacted the performance of primary insurers by limiting their choice of reinsurance carriers based on price competitiveness and quality of reinsurance coverage.

d) Although Brazil Re demonstrates some better underwriting results compared to the other locally established reinsurers (mainly subsidiaries of top international reinsurers), these differences in underwriting results might be due to (i) higher standards used by private reinsurers to evaluate their insurance liabilities as well as (ii) a bigger and more diversified portfolio written by Brazil Re, which has been supported by the law.

e) In contrast with the proposed NCR, Brazil Re has full access to the international markets, which enables it to retrocede a major part of its portfolio risk to the global players thus reducing its peak risk accumulations.

f) Finally, referring to SUSEP[6] (insurance regulator in Brazil), with the recent approval of new regulations and operational guidelines, the market expects to see a greater portion of the risks in Brazil being reinsured by global programs. The consequences will include increased reinsurance capacity, more specialization in the reinsurance market, new products and competitive prices due to the market's newfound efficiency.

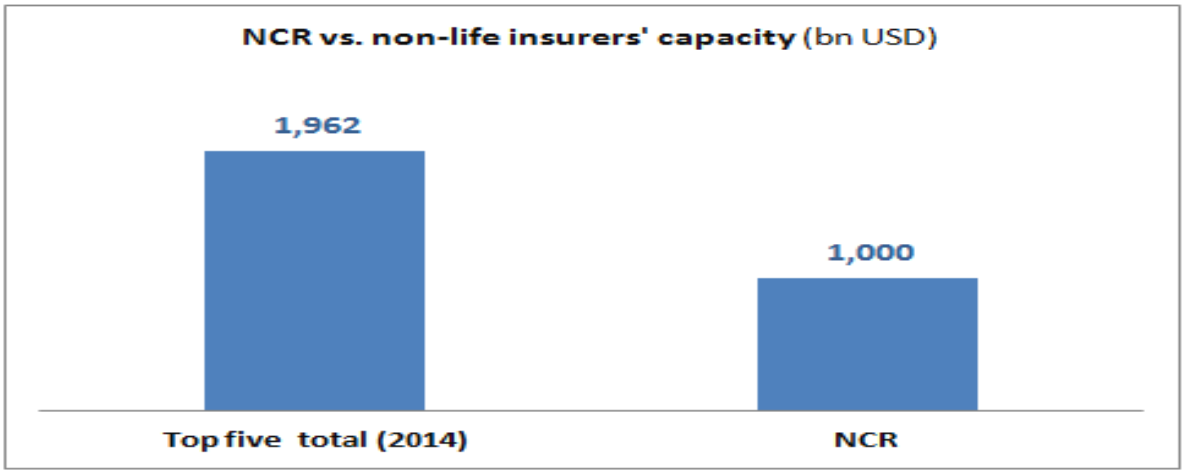
81. Given the current stage of market development in the Russian Federation with a large number of professional and well capitalized (re) insurers, the creation of the NCR may not be the most effective solution to the problems created by the sanctions regime for the insurance industry due to a) the rather negative international experience with national reinsurance companies, most of which have been eventually privatized at a considerable cost to the state and b) the adverse potential impact on the development of a competitive reinsurance market in the Russian Federation.

a) With only USD 1 billion in capital, it is unlikely that the NCR will succeed in addressing the very challenges which will have 'triggered' its creation. Due to its inherent inability to transfer a part of risk aggregates arising from reinsurance of risks of the state or private companies under the Western sanctions to credible international reinsurance players, the NCR is likely to retain a very large risk exposure which may exceed by far its net retention capacity and further pose a major fiscal risk to the state in its role of the guarantor of last resort. As shown in Figure 8, the NCR's capital is comparable to the equity of the top five biggest non-life (re) insurers

[6] http://www.susep.gov.br/english-susep/insurancemarket

which altogether had about USD 2bn in equity in (2014), and whose capacity is likely to be underutilized in 2016 due to the adverse economic environment and the Western sanctions.

Figure 8: NCR's capacity vs. commercial reinsurers



Source: CBR

b) The creation of NCR will also have adverse effects on the market competition and long-term stability of the insurance market as the company is likely to emerge as the largest (not the safest though) reinsurance player in the Russian insurance/reinsurance market a) with mandatory cessions coming from insurers' ordinary business and b) without being subject to the market competition.

E. Insurance Sector Key Challenges

Table 11 below summarizes the key institutional, regulatory and market development challenges to be addressed by the insurance sector in the Russian Federation:

Table 11: Key challenges of insurance sector in the Russian Federation

#	Key challenges of insurance sector to be addressed	Term*
1	Introducing actuarial reserves for solvency assessment purposes and enhancing the role of supervision actuaries	S
2	Bringing the calculation of the minimum solvency margin at least in line with the EU Solvency I	S

	standard requirements and introducing a buffer for the solvency ratio, which shall be used as a threshold to trigger early interventions.	
3	Introducing minimum requirements regarding the insurers' net retentions on per risk and aggregate level.	S
4	Developing an effective insurance supervision approach with automated data storing and processing capabilities which ensures the optimization of contribution from all involved CBR departments;	M
5	Developing an effective Early Warning System (EWS) with clearly set benchmarks to determine the areas and companies which require close attention.	M
6	Introducing sound corporate governance criteria and risk management function	M
7	Considering to make employers' contributions to employees' life insurance/endowment plans tax deductible the government	S
8	Developing sound CMTPL claims reserving standards as a prerequisite for the tariff liberalization	M
9	Introducing agricultural insurance requirements for farmers receiving agricultural subsidies	M

10	Developing claims settlement standards relating to both material and non-material damages that can be equally applied by insurance companies and courts	S
11	Considering an alternative market-based approach to secure additional reinsurance capacity instead of creating a national reinsurer	S
12	Addressing the claims-paying-capacity issues relating to developers' liability insurance against the third parties for unfinished but prepaid construction	S

Term*: S-Short Term; M-Medium Term

V. RECOMMENDATIONS

The recommendations are based on the review of the current regulatory and institutional framework and the performance of the insurance market.

Effectiveness of insurance supervisory process

82. The international experience shows that there is no single best approach to the institutional organization of the integrated financial supervision. Various countries have developed various organizational structures, which take into account the (a) objectives of the integrated supervision, (b) financial market developments and their trends within countries (e.g. development of financial conglomerates), as well as the (c) optimization of the resources and costs dedicated to the financial supervision. The supervisors should identify and address the risks around their organizational models.

- In this context, the supervisors organized along the lines of a sectoral model (where a dedicated supervision department carries out the supervision of a specific segment of the financial sector) should effectively address the risks relating to the interrelations among sub-sectors, which becomes increasingly important with the growing presence of financial conglomerates and complexity of financial products.

- Likewise, the financial supervisors with a horizontal model of organization (where functional departments assume all the supervisory functions relating to a given sub-sector), should dedicate appropriate level of attention and establish sufficient sector-related expertise and experience for each of the supervised segments of the financial sector.

- Finally, to address the drawbacks relating to both models and their combinations, the supervisors should build effective coordination and harmonization of supervisory units (whether sectoral or functional) with a view to achieving the overall objectives of the integrated supervision.

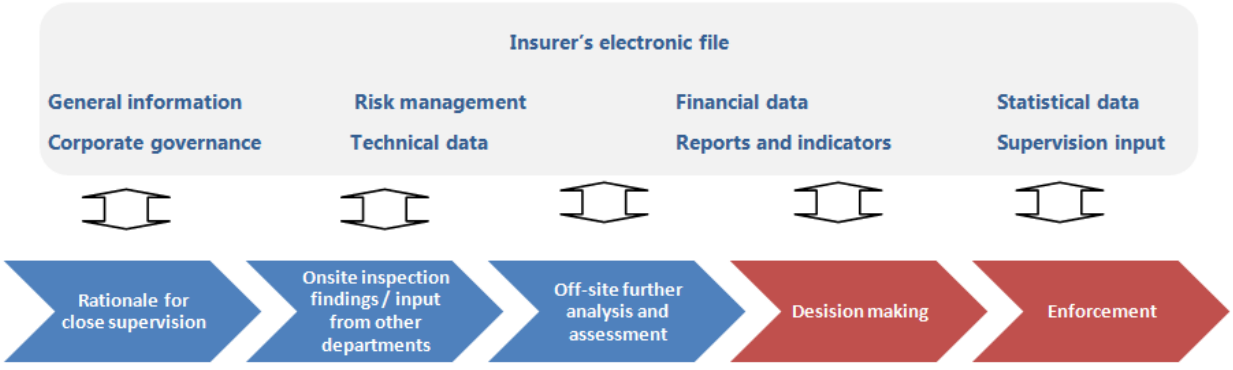
The case of the Russian Federation appears to be more reminiscent of the horizontal approach of integrated supervision where core supervision functions (e.g. onsite, licensing) are carried out by integrated multi-sectoral functional departments. However there is also an element of specialization as the off-site monitoring of the insurance sector is conducted exclusively for the insurance sector by the dedicated Insurance Market Department.

83. A switch to the risk-based supervision should be supported by the internal insurance supervision reorganization aiming at the professionalization of all core functions of insurance supervision (from off-site to onsite and licensing) with the view to achieving more transparency and accountability for every member of supervisory staff involved in the supervision process. To increase the effectiveness of the integrated insurance supervision, the CBR may consider forming multi-disciplinary teams with each team member providing his professional input to the insurer's supervision file (e.g. an actuary - providing a validating of

insurer's reserves and solvency margin, an onsite inspector - an input on the quality of data used for statutory and financial reporting purposes; a reinsurance expert – on the adequacy of the insurer's reinsurance program; a finance expert – on the adequacy of insurer's assets (jointly with onsite inspector); a curator – on the adequacy of management, business plan, and risk management, etc.). The company's annual file should be annotated by the IMD senior manager, who would add his comments to the report, which by then would already have all expert inputs from the members of the supervision team for his review. The initiative of creating insurers' automated dossiers could serve as a good platform in this regard.

84. The CBR should consolidate an effective review and monitoring approach with IT capabilities to a) automatically process and store the information submitted by each insurance company and b) keep track of automated analysis and additional input provided by various departments through the overall cycle of insurance supervision. Such a recommendation follows the EU guidelines[7] on the supervisory process, which requires the regulator to ensure that the information supporting the conclusions from the supervisory review process is documented and easily accessible within the regulatory body. To this effect, it is recommended that the CBR creates electronic dossiers for individual insurers with useful information on their a) business profile; b) corporate governance and risk management; c) statistical and technical information per lines of insurance business; and c) financial information comprising solvency, reserves adequacy, and assets. The electronic folders (databases) should be standard for all insurers in terms of information, with a view to enabling generation of timely automated reports at the company and market level for the purpose of supervision and public disclosure. A clear protocol should be developed with regard to the level and type of access for specific CBR departments to the electronic folders, which should consistently track all supervisory steps, including a) rationale for the close supervision; b) on-site inspection findings; c) assessment and analysis; d) supervisory decision; and e) enforcement.

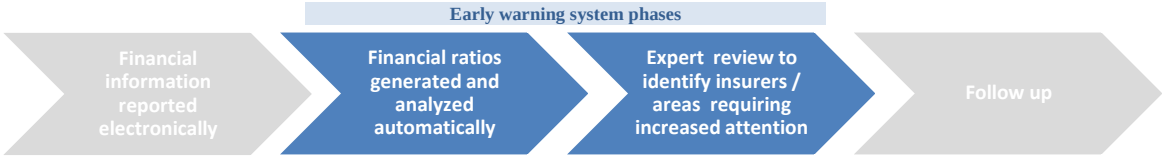
Figure 9: Insurer's electronic dossier



[7] EIOPA-BoS-14/179 EN, Guidelines in supervisory review process

85. An effective Early Warning System (EWS) should be developed to help the IMD determine the areas and companies which require close attention and further coordinate activities with other CBR departments involved in insurance supervision. Early identification of problematic companies is essential to a) determine if the companies can regain their financial strength or otherwise b) minimize the impact resulting from insolvencies. Based on other countries' experiences, the early warning system may consist of two phases combined with a follow-up component.

Figure 10: Early warning system phases



86. In many countries, a set of ratios with respective benchmarks constitutes the early warning system. As such, when a ratio or a series of ratios moves in an adverse direction or crosses some determined thresholds then escalation of concern follows. In many cases, each of the ratios is examined separately and then a qualitative judgment is made about the conclusions that should be drawn from the results. In other cases, a more quantitative decision rule is applied based on the assessment of a combination of specific ratios. An even more advanced approach involves taking a set of ratios and determining a formula for their conversion into a combined one single risk index. However the results of these more advanced approaches have generally not been sufficiently conclusive compared to the assessment of individual ratios and the amount of work required to develop such systems is substantial.

87. The adoption of a fully risk-based supervision regime requires the insurers to provide supervisors with relevant information as soon as they become aware of any issues that can materially impact their solvency. When internal models are used, these should be able to generate results based on the ongoing operations of the insurer. However, it is noted that the ratio analysis can also form an important element of off-site supervision which can assist the supervisors with making informed decisions with regard to the allocation of regulatory efforts toward those companies that display the weakest ratios in the market.

88. As shown in Figure 10, the IT system should automatically process the submitted information and integrate analysis into key ratios which will be analyzed within well-defined risk bands established by the supervisor. The ratios shall evaluate various aspects of the insurer's financial condition and stability based on 'accepted' ranges defined for each ratio as benchmarks for performance. At a later stage, the ratios can be aggregated into one internal risk index that can be used (in conjunction with individual ratings) to rate companies for the purposes of allocating supervisory resources.

89. The ratios should be easily traceable to the data provided by the companies and verified in the course of onsite inspections by onsite supervisors. Key risk indicators should

be made available to the companies to enable them take timely preventive actions and avoid unwarranted CBR interventions. Based on the experiences of other supervisors,[8] the CBR may decide to make the results publicly available by clearly highlighting areas falling outside the normal ranges. The development of the CBR automated capabilities is also expected to reduce the growing costs of insurers' regulatory compliance.

90. Finally, together the set of ratios and the risk index can provide a good indication of which companies may require closer supervision. However, on their own, such an indicator based assessment cannot provide a full and conclusive characterization of the situation. While the early warning system is essential for identifying problems at an early state, its results, especially those falling outside the usual ranges, should be subject to the additional analysis and inspections of concerned insurers by respective CBR departments. Figure 11 below provides a set of key ratios which can be considered and further amended based on the other international experiences[9] and specific guidance provided in this regard by the World Bank and the IAIS.[10]

Figure 11: A sample of key tests and ratios for non-life insurance

#	Test or ratio	Description	A few suggested margins	
			Low	High
1	**Change in writings**			
	Change in gross premiums written	NWP, current year – NWP, previous year] / NWP previous year		
	Change in net premiums written	[NWP, current year – NWP, previous year] / NWP previous year		
2	**Insurance risk ratios**			
	Net risk ratio	NWP to equity	<=3	
	Gross risk ratio	GWP to equity	<=7	
3	**Change in equity ratio**	[Equity, current year – Equity, previous year] / Equity, previous year	-10%	50%
4	**Receivables Test**	Premium debtors and related party debts to Equity		<=50%
5	**Surplus Aid Ratio**	[(Ceded unearned premiums / Ceded premiums) x Reinsurance commissions)] / Equity		<=25%
6	**Equity as a % of Liabilities**	Equity / Liabilities		≥ 25%
7	**Solvency Margin ratio**	Available solvency / Minimum required solvency margin		>1.5
8	**Safety Ratio**	Net claims & adjustment expenses outstanding / Equity		≤ 2.5
9	**Return on Equity (ROE)**	Net income / [(Equity, current year + Equity previous year)]/2		
13	**Claims Provision Adequacy Ratio**	Excess or deficiency in respect of prior years' outstanding claims / Equity		≤ -10%.

[8] http://www.naic.org/documents/RRI-ZU-15-03.pdf (IRIS Ratio Results for 2014)
[9] http://www.naic.org/documents/prod_serv_fin_receivership_uir_zb.pdf
[10] http://www.iaisweb.org/modules/cciais/assets/files/pdf/061002_ICP_12B__A_Primer_on_Non-Life_Insurance_Ratios.pdf

Claims reserving standards

91. The CBR should introduce requirements on risk-based actuarial assessment of insurers' claims reserves and related adjustment costs and ascertain their use in the calculation of insurers' available solvency. The requirements should provide guidance on a comprehensive set of claims reserving methods that can be used by non-life insurers to calculate their IBNR claims reserves based on claims patterns for each line of business. The set of actuarial methods should be determined by the CBR in close cooperation with the self-regulated actuarial organizations based on the best international experience and the Russian insurance market specifics. The self-regulated actuarial organizations should play a key role in ensuring the practical implementation of the actuarial methods by insurers. To this effect, self-regulated actuarial organizations should be involved in a) preparing detailed claims reserving manuals and b) observing the implementation of the actuarial claims reserving practices by the insurance industry.

92. To resolve material disagreements, which may arise among companies' and supervision actuaries with regards to the calculation of reserves, it is further suggested to mandate the Actuarial Council[11] consisting of the CBR actuaries and representatives from the self-regulated actuarial organizations with the task of handling the technical disputes in a professional manner. The new supervisory approach to insurance reserves requires (i) a major strengthening and consolidation of the actuarial function within the CBR and (ii) an increased role of the self-regulated actuarial organizations. It is further recommended that the supervisory actuarial function is taken over by the IMD as the core insurance supervision department.

Capital adequacy

93. The IAIS has established a number of requirements to insurers' solvency regime. The minimum solvency margin is used to measure the level of risk that the company is carrying. While it is not possible to have a perfect measure, reliable measurements require considerable data collection and information, something usually practical only at the level of individual insurer. Both methods (Solvency I and Solvency II) account for business volumes respectively through the use of indexes and exposures (which are to some extent correlated with volumes). However, in line with the ICPs and the Principles on Capital Adequacy and Solvency, the minimum solvency margins calculated based on the index (EU Solvency I) or even the risk-based measure of capital needs (EU solvency II) are deemed to be insufficient for insurers with small volumes and thus are further reinforced by fixed minimum levels of capital requirements independent. The reason is that, regardless of the size of the insurer, some risks exist, and new or small insurance companies face particular risks and challenges which include the following:

[11] The Actuarial Council was established by the CBR in 2014 in accordance with article 9 of 222-FZ "On the Credit Rating Agencies Activity in the Russian Federation, following the amendments to the Federal Law №86-FZ "On the Central Bank of the Russian Federation" and Other Legislative Acts".

a) Difficulties in managing start-up operation that do not exist in an ongoing business. (e.g. due to insufficient data to estimate the amount of claims that may arise from insurance policies. An established company of a considerable size usually has sufficiently good data for its claims projections.
b) To quickly build their book of business up to a viable size, new or small insurers are more eager to accept riskier or less profitable business (poorly priced) compared to a well-established insurer.
c) Another reason for the absolute minimum capital requirement relates to the unique nature of insurance, which requires an insurer to meet long-term obligations arising from the insurance contracts. To this effect, absolute minimum capital requirements aim to ensure that only operations with sufficient capital resources are permitted to enter the insurance market.

94. To achieve a more reliable calculation of the insurers' solvency margin (which is yet index based in the case of Russian Federation), the solvency requirements should address in a consistent manner the valuation of liabilities (mainly technical reserves), which is not the case today. To this effect, the CBR should ascertain that the risk-based actuarial assessments of insurance liabilities will be considered in the calculation of insurers' available solvency.

95. While both the regulator and insurers are not yet prepared for a risk-based solvency regime, the CBR should bring the calculation of the minimum solvency margin at least in line with the EU Solvency I standard requirements and further develop a prudent risk management and corporate governance framework as a pre-requisite for the introduction of EU Solvency II in the future. The CBR should further introduce a buffer for the solvency ratio, which shall be used as a threshold to trigger early interventions. Such a buffer can be set at 150 percent of the minimum solvency margin calculated through the standard EU Solvency I approach similar to the good regulatory practices in some other countries[12].

Reinsurance

96. To address the current gap with the risk management requirements, the CBR should require insurers to develop annual reinsurance programs with details on reinsurances they plan to arrange for main lines of business, including types of reinsurance, maximum net limits per line of business, as well as criteria used for selecting their reinsurers.

97. With the introduction of more prudent risk management requirements, the CBR should require insurance companies (at least initially those which are systematically important) to determine maximum amounts that they will have to pay out in the case of a

[12] Canada: OSFI suggests that the ratio of actual capital to required capital should be at least 150%. A ladder of intervention exists if an insurer falls below this level.
http://www.naic.org/documents/committees_smi_int_solvency_canada.pdf

In India, insurers are required to maintain a minimum solvency ratio of 1.50. Insurance players whose solvency ratios are dangerously close to this minimum level are closely watched by the insurance regulator, the IRDA.
http://www.morningstar.in/posts/27829/why-solvency-ratio-matters-in-insurance-1.aspx

.

single big risk event (the Net Maximum Event Retention or 'NMER'), or the maximum total claims arising from the event of a probable but very unlikely event (referred to as the Probable Maximum Loss-PML). The minimum requirements for such events can be described by the CBR based on their low probability or return period where an event with a probability of say '0.5 percent' would have a 'return period' of '200' years or be described as a 'one-in-'200' year' PML event. The CBR should require insurers calculate and report the NMER or PML as part of supervisory financial reporting on an annual basis.

Insurers and reinsurers may set "per risk" and "per event" risk retention limits as well as consider blocks of business in aggregate. For example, Stenhouse (2002) gives the long-standing position of the Australian supervisor in this regard:

a) Per risk retention. Not more than 5 percent of net tangible assets, with a maximum of 3 percent considered more prudent, especially as the size of the insurer grows.

b) Per event retention. Not to exceed the amount of net tangible assets over the insurer's statutory minimum solvency. This seeks to ensure that the insurer can withstand extreme claims without breaching statutory solvency.

Source: IAIS

98. Appropriate and documented criteria are needed to assess the financial condition and credit risk of reinsurers (OECD 1998). These criteria can include credit-risk requirements based on the financial condition or the credit standing of the reinsurer. The criteria for the locally registered reinsurers may be determined based on their size and capacity (capital base) by also using applicable reliable ratings. The below recommendation provided by Swiss Re for non-life insurers may need to be further amended with additional criteria on the local reinsurers' solvency ratios calculated based on the a prudent actuarial valuation of the technical reserves.

Swiss Re (2003)
Whereas in life insurance (with the exception of the United States) reinsurance is not a big credit risk, in non-life insurance it is significantly higher.

As the primary insurers have generally diversified their reinsurance cessions, even the share of a big reinsurer ought not to come to more than 4 percent of the non-life insurance balance sheet (total assets). So that the possible bankruptcy of an individual reinsurer does not hold any systemic risk.

Source: IAIS

99. For reinsurers supervised based on the EU Solvency II or equivalent regimes (as recognized by the EC), the CBR may introduce a credit risk charge for reinsurers based on (i) their credit rating assigned by the agencies accepted by the EU or (ii) solvency ratios for unrated reinsurers subject to fulfillment of the criteria set by the EU regulations[13]. It is

[13] Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC (http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0035&from=EN)

recommended that the unlimited layers of reinsurance programs are covered only by strong reinsurers (rated A- by Standard and Poors' or equivalent). Until the EU Solvency II risk-based solvency calculations are introduced, the reinsurers' credit risk charge shall be deducted from the reinsurance assets for the purpose of calculating the insurers' solvency. Besides these general recommendations, the CBR should undertake a thorough assessment of current and proposed reinsurance requirements in consultation with market stakeholders with a view to determining a most workable approach for the country.

Table 12: Mapping credit quality steps with ECAI ratings

Credit quality step		**0**	**1**	**2**	**3**	**4**	**5**	**6**
Probability of default		**0.00%**	**0.01%**	**0.05%**	**0.24%**	**1.20%**	**4.20%**	**4.20%**
Solvency ratio of unrated reinsurer based in EU equivalent regimes			196%	175%	125%	95%	75%	
1	S&P´s	AAA	AA	A	BBB	BB	B	<B
2	AMBEST	aaa	aa	a	bbb	bb	b	<b
3	Fitch	AAA	AA	A	BBB	BB	B	<B
4	Moody´s	Aaa	Aa	A	Baa	Ba	B	<B

Source: EIOPA

100. In the process of monitoring an insurer's reinsurance program, the supervisor should consider the following issues:

a) Verify that the board of the insurer has approved and regularly reviews its reinsurance program consistent with the insurer's business plan and risk profile.

b) Verify that that senior management has implemented the reinsurance policies and procedures in compliance with the reinsurance program and has sufficient controls in place to demonstrate compliance.

c) Receive financial and technical information to be able to evaluate the impact of the insurer's reinsurance program and use proper expertise (including actuarial analysis) for its assessment.

d) Except for the reinsurance statistical and financial information, the supervisory reporting checklist should comprise but not be limited to (i) annual reinsurance program; (ii) maximum retention levels for each line of business; (iii) information on reinsurers participating in the program. In addition, the CBR may require insurers to submit special types of risk transfer contracts either for prior approval or as a part of insurers' reporting package, including financial reinsurance or the ILS types of contracts. The regulation should detail the regulatory powers, policies, and measures that need to be taken when the reinsurance documentation requirements (contract wording and reporting requirements) and processes are not complied with. The measures can be set relative to the type and extent of the breach by comprising (a) fines; (b) prohibition of particular reinsurance treaties or risk transfer contracts, and (c) changes to reinsurance or risk transfer contracts.

101. To be able to adequately assess the insurers' reinsurance programs the CBR should develop the supervisory expertise in the area of reinsurance and involve the supervision actuaries in the review and monitoring of reinsurance related areas. To effectively monitor the reinsurance related areas, the CBR can further introduce reinsurance related ratios, including the net retention ratio and the ratio of NMER and NPML to available solvency within the set of early warning tests and ratios by also introducing minimum benchmarks to assess them (see paragraph 86).

Risk Management and Corporate Governance

102. To comply with the IAIS principles and standards, the CBR should develop specific regulatory requirements on (a) suitability of shareholders; (b) integrity, reputation and professional responsibilities of the supervisory board for company's risk management; (c) level of knowledge, skills and expertise at the Board level; and (d) further require companies to have clear remuneration policies and practices covering senior staff positions whose actions may have a material impact on the risk exposure of the insurer. The insurers should clearly define (a) the role of Boards in the oversight of risk management policies including but not limited to insurance underwriting (including pricing, claims and reinsurance), credit , market and operational risks, as well as (b) the appointment, performance assessment, and dismissal of the insurer's senior management, and heads of each control function; and for ensuring that there are adequate resources, expertise, support and authority in place for sound insurance operations.

Risk Management

103. Effective management of all types of risks[14] requires the presence of a corporate structure, which firmly places the overall responsibility for the insurer's risk management with the Board and clearly defines the roles of the CEO, CRO and CFO. The Board should establish the insurer's risk appetite and risk tolerance objectives relating to the market risk and further develop, maintain, and monitor risk policies, limits, and approvals depending on the nature and scale of risks. The insurer should have regular programs for providing relevant training of its staff and ensuring that all risk management staff have an appropriate level of awareness of the credit risk management policies and practices relevant to their roles. All key risk processes must be subject to periodic independent reviews by appropriate experts. The internal audit function should play the key role in this regard and should report directly to the board on these matters on a periodic basis. To professionally carry out the review of risks, the internal audit personnel should have sufficient expertise and trainings.

104. The insurer should be required to establish a sound underwriting policy with appropriate approval levels throughout the entire underwriting process.

[14] This risk control section builds upon the modules of the Core Curriculum for Insurance Supervisors developed jointly by the IAIS and the World Bank.

Insurance risk control

Table 13: Types of insurance risks

Insurance risks	Explanation
Underwriting process risk	Risk from exposure to financial losses related to the selection and approval of risks to be insured.
Pricing risk	Risk that the prices charged by the company for insurance contracts will be ultimately inadequate to support the future obligations arising from those contracts.
Product design risk	Risk that the company faces risk exposure under its insurance contracts that were not considered in the design and pricing of the insurance contract.
Claims risk	Risk that many more claims occur than expected or that some claims that occur are much larger than expected claims resulting in unexpected losses. This includes both the risk that a claim may occur, as well as the risk that the claim might develop adversely after it occurs.
Catastrophe risk	Insurer's ability to withstand catastrophic events, increases in unexpected exposures, latent claims or aggregation of claims; the possible exhaustion of reinsurance arrangements.
Economic environment risk	Risk that social conditions will change in a manner that has an adverse effect on the company.
Net retention risk	Risk that higher retention of insurance loss exposures results in losses due to catastrophic or concentrated claims experience.
Policyholder behaviour risk	Risk that the insurance company's policyholders will act in ways that are unanticipated and have an adverse effect on the company.
Reserving risk	Risk that the insurance reserves held in the insurer's financial statements will prove to be inadequate.

a) Those entrusted with approval authority must have appropriate expertise and experience to fully judge the possible consequences of their decisions (financial and organizational impacts on their own areas as well as on the entire company).

b) All key and complex processes of the insurer must be subject to periodic independent review by appropriate experts.

c) The insurers should be required to establish appropriate limits based on the levels of authority. The ability of all key processes to operate within the agreed parameters and authorities must be monitored and exceptions examined for their causes and significance.

d) The insurer should ensure that all underwriting risk management team have an appropriate level of awareness of the risk management policies and practices relevant to their business. The insurer should ensure that the level of training (especially for those involved with highly complex risks) is commensurate with best industry's standards for such responsibilities.

e) Any change in source data, experience, models, assumptions, should be subject to appropriate independent and professional change control procedures with a view to avoiding changes that

can occur from a natural desire to better meet the insurer's performance (e.g. example, return on equity) targets.

f) The insurers should be able to document and describe the key model assumptions, methods, and output of their models (including technical basis) even when such models are used to assess complex risks and viewed as 'black box'. The models should also be subject to validation and review by knowledgeable professionals. The models should conform to all relevant industry and supervisory norms and standards.

Credit risk control

Table 14: Credit risk monitoring

Credit risk monitoring by the insurer	Detailed reporting of new credit risk exposures assumed or purchased
	Summary of all credit exposures assumed by rating
	Exception reports identifying issuers whose rating has changed
	Watch list reports for those exposures exhibiting early signs of distress
	Reports for exposures in default.

105. Effective credit risk management requires the presence of an enabling corporate structure which entails overall board responsibility, a CRO reporting to the CEO or CFO and the establishment (at least in the case of systemically important insurers) of a senior level credit risk committee (typically chaired by the CIO). The Boards should be required to develop, maintains and monitor the insurer's credit risk policies, authorities, limits, and experience. Large life insurers are also recommended to maintain committees at the executive and business unit levels for asset-liability management (ALM).

a) Important objectives approved by the Board should address asset classes eligible for the company's investments, target ranges of investment in those classes, average credit quality, and other parameters required by the regulatory or internal risk management requirements. The Board should also approve the monitoring procedures to be used by the insurer to track its progress.

b) Appropriate approval levels should be allocated to the asset selection and credit risk review steps, as well as the entire credit risk management framework. Key credit risk approvals relate to the purchase of each asset, subsequent credit review of the asset, and actions taken to address events related to credit risk.

c) Appropriate limits should apply for the risk decisions made by managers to control the company's exposure to credit risk, including limits restricting the amount committed to any

one borrower, to an industry, or to a geographic region. Limits might also be imposed for the maximum and minimum exposure in a given asset class. All the insurance limits should comply with the investment regulations.

d) The ability of all key processes to operate within agreed limits and authorities must be monitored and exceptions examined for their cause and significance.

e) Specifically, the insurer shall be required not to purchase assets from a class for which it does not have relevant expertise. The insurer should be able to provide evidence that the investments are driven by informed decisions.

Market risk control

106. The risk appetite and risk tolerance objectives should consider insurers' market risk. For example, non-interest-sensitive lines may have an overall duration match target, while interest-sensitive lines may maintain a much closer match of assets and liabilities.

a) The CBR may ask systemically insurers writing long tail business to establish ALM committees at the Board and executive levels with a view to developing, maintaining and monitoring market risk policies, limits and approvals.

b) Appropriate approval levels should be established throughout the steps of the ALM matching process. The employees with approval authority must have proper experience and training so they can fully judge upon the possible consequences when taking the decisions.

c) The insurers' key market risk processes and the ALM matching models must be subject to periodic independent review from the internal audit function which must report to the board on a frequent basis on the market risks. The internal audit personnel should have sufficient expertise and trainings to professionally carry out the review.

d) To control its exposure to market risk, the insurer should establish appropriate levels of authority on the risk decisions taken by its managers. The ability of all key processes to operate within agreed limits and authorities must be monitored and exceptions examined for their cause and significance.

Operational risk control

107. While the insurer may have an overall target range for the size of its operational risk, the most useful objectives may be expressed in terms of the typical sources of operational risk (customer complaints, instances of misleading sales practices, instances of employee error, etc).

Table 15: Operational risks

Human capital risk	for example, employing people with the appropriate skills and experience

Management control risk	for example, including appropriate sets of controls in internal processes and using and communicating those controls effectively
System risks	for example, ensuring that systems used in the operation of the insurer are adequate, appropriate, reliable, and scalable, and have adequate security, backups, and disaster recovery plans
Strategic risks	for example, addressing threats to operations from competitors
Legal risk	for example, complying with all laws and regulations; employing best business practices and standards of corporate governance; proactively addressing policyholder expectations

a) The most important control on operational risk will be training and communication throughout the insurer on the importance of operational risk and its consequences.

b) While there will remain a natural tendency to hide operational risk events within the normal operational reporting of the insurer, the internal audit function should consider how best to encourage the disclosure of operational risk events.

108. The insurer's board and senior managements should be required to understand and manage all the risks in a comprehensive manner. Various risks experienced by an insurer vary directly or indirectly based on their interaction with other risks. The insurer should check the dependency risk dependency and concentration.

109. Risk management is enhanced through the use of scenarios which enable insurers to examine the effects on its risks if a range of assumptions hold or events occur. They also help management determine the best course of action to follow in managing the insurer's risks. The CBR may require insurers (especially those which are systemically important) to project their future financial condition under various adverse scenarios selected based on the insurer's risk profile.

110. To enhance the quality of insurers' balance sheets, the CBR should introduce minimum criteria on the qualifications of external auditors involved in audits of insurers' accounts (including the involvement of certified audit actuaries).

111. It is further recommended that the CBR requires systemically important insurers to establish an explicit risk management function to address the issues of their complex insurance operations. Systemically important insurers may also be encouraged to develop their internal models which quantify risk under a sufficiently wide range of risk scenarios through the use of complex simulation and modeling techniques. However, the regulatory introduction of such models will require a high level of technical expertise within the CBR to evaluate and accept such models for solvency calculation purposes.

Corporate Governance

112. Supervision of corporate governance should involve a combination of offsite analysis and onsite inspection. The measurable elements of the corporate governance requirements can generally be assessed through offsite analysis, while it is generally necessary to inspect the principles-based requirements through a document review and through discussions with senior management as these are generally possible only onsite. Detailed requirements on corporate governance can be introduced based on examples of EU countries[15].

113. Moving towards a risk-based supervision of insurance entails the development of regulatory requirements pertaining to the internal control functions comprising (a) the risk management function (which should be established as a separate unit at least in systemically important insurers, (b) compliance function, (c) internal audit and (d) actuarial function. The EU Solvency II approach provides detailed principles which can be used to develop the requirements for the control functions which should operate under the ultimate responsibility of, and report to the Board and shall cooperate with the other functions in carrying out their roles (see Section 2 of the EU Delegated Regulation). The internal control guidelines may also consider the principles set by the EU[16].

114. The introduction of more advanced risk based approach to supervision will specifically require to extend the role of actuaries in insurance companies to cover (a) preparation of stress test reports at least on an annual basis; (b) assistance in the formulation of suitable policies relating to investment of technical reserves; (c) compliance of specific insurance product tariffs with the company's pricing policy and (d) contribution to designing effective reinsurance programs. Responsible actuaries should also be required to document all the steps carried out in calculating the insurers' technical reserves *(Article 265 of the EU Delegated Regulation provides detailed principles on the proper documentation of the actuarial reserving process).*

115. The actuarial supervisory function has already been established within the CBR. However the actuarial roles and responsibilities are yet to be expanded and integrated with the core off-site and onsite supervisory functions. To increase the effectiveness of the actuarial function, the CBR should explore the possibility of making actuaries a part of the IMD.

116. Several of the insurer's key internal processes may involve significant judgment, outsourcing, or expert systems, necessitating specialized independent (and perhaps external) reviews of specific aspects of the insurer's operations. To this effect, we recommend that the CBR establish requirements for the outsourced functions, which should be supervised at the same level of prudence as if carried out directly by insurance companies The Solvency II framework

[15]https://www.centralbank.ie/regulation/Documents/Corporate%20Governance%20Requirements%20for%20Insurance%20Undertakings%202015.pdf

[16] https://eiopa.europa.eu/CEIOPS-Archive/Documents/Reports/0312_madrid.pdf

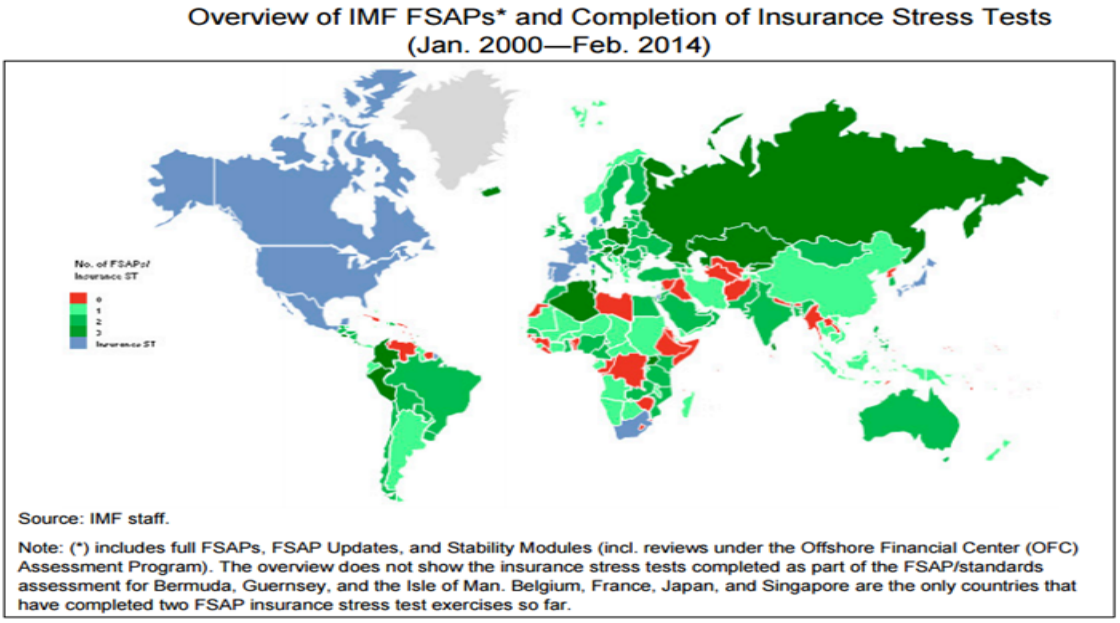
(Article 274 of Delegated Regulation) specifies detailed requirements related to activities outsourced activities carried out by the EU insurers.

117. The CBR is also recommended to develop principles relating to the insurers' remuneration policies. The detailed principles developed under the EU Solvency II *(Article 275 of Delegated Regulation)* provide a good ground for the development of such principles, while the CBR may also consider detailed regulations[17] developed by the EU countries based on such principles.

Macro prudential policy and surveillance

118. A risk-based supervision regime in place is a precondition for establishing a sound macro prudential policy and surveillance in insurance. As shown in Figure 12 below, insurance stress tests have been part of FSAP assessments in countries with advanced insurance supervisory regimes. With the establishment of sound corporate governance and risk management requirements, the CBR will be in position to introduce risk-based supervision in insurance, which can be followed by the implementation of complex insurance stress tests as a part of the CBR's macro prudential policy and surveillance.

Figure 12: IMF FSAPs and completion of insurance stress tests



Source: IMF

119. While the introduction of the EU Solvency II is a rather complex process, the introductory work can start with the group of systemically important insurers on an pilot

[17]http://www.ivass.it/ivass_cms/docs/F22599/Regulation%2039.pdf

(continued)

project basis. Stress-testing scenarios and analysis can follow the guidance provided in the IMF's document on Macro prudential Solvency Stress Testing of the Insurance Sector[18] and by also consulting the stress-tests carried performed in the EU countries[19].

Insurance associations

120. The CBR should promote the roles of the ARIA and other professional insurance associations in developing a sound corporate governance and risk management and market conduct framework for the insurance industry in the Russian Federation. In addition, the professional insurance associations may be required to develop professional education and certification programs and provide trainings to actuaries, intermediaries and claims adjusters subject to clear procedures and close monitoring by the CBR (see the WB document[20] on the role of associations).

121. The increased role of self-regulated actuarial organizations should comprise their contribution in (a) developing industry's actuarial standards and (b) safeguarding the adoption of sound practices by the market actuaries. To this effect, the **self-regulated actuarial organizations** can draft the actuarial guidelines to which will be then approved by the CBR following a transparent process of discussions with the industry. Among its functions, the actuarial association should (a) enforce professionalism requirements on qualified actuaries, (b) further the actuarial practice, (c) serve as the voice of the profession in the public interest when interacting with governments, the public, and other organizations, and (d) provide continuing professional development for their members.

Licensing

122. Insurers should be required to have strategic plans approved by their boards. The CBR should also introduce requirements for a sound business plan and financial projections as a pre-requisite for licensing of insurance organizations. Based on the IAIS recommendations, the regulator should request the submission of a business plan describing the proposed business for at least three years ahead for non-life insurers and seven years for life insurers. The business plan should demonstrate sufficiently that the company will be able to maintain a sound financial position and meet its obligations at all times during the projected years. The business plan should include at a minimum the following substantiated information:

a) The types of insurance (classes of insurance) that the company proposes to exercise:

   This information is crucial for determining the amount of the financial resources that the insurer should have during the first years. The information shall not only comprise the classes

[18] https://www.imf.org/external/pubs/ft/wp/2014/wp14133.pdf

[19] https://eiopa.europa.eu/Publications/Surveys/Stress%20Test%20Report%202014.pdf

[20] http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Primer09_Role_of_Insurance_Industry_Association.pdf

of insurance, but also describe in a detailed manner the nature of the risks (insurance products) and the client groups with which the company intends to conclude the contracts. The company should provide information on whether it also proposes to accept reinsurance business (inward reinsurance), and if so, in which insurance classes.

b) The supervisor should also be empowered to receive detailed information on the insurance products to be launched and technical basis used for the calculation of premiums prepared by the certified actuary.

c) The basic principles of the company's reinsurance policy.

The insurer should provide information on the reinsurance program projected to cover its risks, by also furnishing information on the reinsurers with which the insurer will arrange its reinsurance contracts (following preliminary consultations held with such reinsurers).

d) Details on the sales network that will be used for the distribution of insurance contracts.

e) Estimated set-up costs relative to the projected business and the financial means allocated for this purpose.

f) Projected financials and solvency margins.

The insurer should present a projection of the expected financial and business development for at least three years (seven-years for life) including simplified profit and loss accounts, balance sheets (including technical reserves and investments) and cash-flows. The financial projections shall be made based on realistic assumptions of business exposure, premiums, claims, commissions, administrative expenses, investment income, and tax. The projected financials should also comprise the methodology to be used for the calculation of technical reserves by the proposed certified actuary and the calculation of the statutory solvency margin for the projected period.

123. Within the current organizational structure, the CBR should develop an effective capability to assess complex insurance license applications against the regulatory requirements. To this effect, a multi-disciplined team may be created (similarly with the team suggested for the purpose of insurance supervision) to carry the assessment of various parts of application with (a) actuaries evaluating the parts relating to technical, provisions, pricing and risk management, (b) market conduct specialists assessing the adequacy of distribution networks and other consumer protection related areas; (c) insurance experts evaluating the technical parts of the application; (d) finance analysts assessing the consistency of financial projections together with insurance experts and (e) lawyers checking the compliance with relevant legal and regulatory criteria. The formation of the multi-disciplinary team should take into account the professional expertise required for the assessment of each application based on its nature and complexity (e.g. types of insurance business required to be licensed). Based on the specific nature of applications the CBR may also involve external experts to assess specific areas of application which require

more advanced expertise. While the coordination of efforts from various experts is required for the assessment of different areas of a licensing application, the process should be well coordinated through a well-organized plan, which defines the tasks and responsibilities at different levels including the whole multi-disciplinary team, small sub-teams within the assessment team and individual experts.

Prevention and correction

124. The CBR should develop risk prevention capabilities through the implementation of an Early Warning System designed to a) detect and prevent negative solvency trends, b) require insurers to take measures at an early stage of such negative trends and c) report more frequently until the warning has been addressed. Depending on the nature of the detected problem, a graduated response may be required. Appendix[1] attached to this technical note, provides an example of a ladder of intervention prepared by the Office of the Superintendent of Financial Institutions (OSFI) in Canada.

Enforcement

125. To ensure an equitable and fair treatment of insurers, the CBR should consider defining the minimum reasonable time allowed for insurers to implement the measures prescribed by the supervisor with regard to (a) restoring their solvency and (b) complying with data requests from both off-site and onsite supervision (that fall beyond the scope of regulatory reporting). As shown below, the EU countries specify the solvency-related deadlines in the main legislation.

Austrian 2016 Insurance Supervision Act[21]

Article 279
(1) Insurance and reinsurance undertakings shall immediately inform the FMA where they observe that the Solvency Capital Requirement is no longer complied with or where there is a risk of non-compliance within the following three months.
(2) Within two months of the observation of non-compliance with the Solvency Capital Requirement, the insurance or reinsurance undertaking concerned shall submit a realistic recovery plan to restore financial soundness to the FMA. The plan requires the FMA's approval and shall ensure that, within six months of the observation of non-compliance, the Solvency Capital Requirement is again complied with....

Article 280
(1) Insurance and reinsurance undertakings shall immediately inform the FMA where they observe that the Minimum Capital Requirement is no longer complied with or where there is a risk of non-compliance within the following three months.
(2) Within one month of the observation of non-compliance with the Minimum Capital Requirement the insurance or reinsurance undertaking concerned shall submit a short-term finance scheme.

[21]https://www.fma.gv.at/fileadmin/media_data/2_Rechtliche_Grundlagen/2_Gesetzliche_Grundlagen/Aufsichtsgesetze/VAG-2016_en.pdf

Insurance intermediaries

126. The CBR (a) should introduce minimum regulatory requirements to the professional certification and registration of insurance agents, which should be subject to a minimum standard qualification and (b) strengthen requirements for brokers' professional experience. Such requirements are by and large in line with the EU provisions[22] and the Core Curriculum developed by the IAIS jointly with the World Bank and applied by various countries. In line with the EU directive it is further recommended to consider introducing a requirement for brokers' liability insurance. The certification and registration of insurance agents will specifically address the issue of non-professional agents that are currently conducting their activities on a temporary and unreliable manner (only for a few months) without sufficient professional expertise required to service insurance products.

Directive 2002/92/EC of 9 December 2002 on insurance mediation

Article 3
Insurance and reinsurance intermediaries shall be registered with a competent authority. In particular, in the case of tied insurance intermediaries, they may be registered by an insurance undertaking or by an association of insurance undertakings under the supervision of a competent authority.

Article 4
Insurance and reinsurance intermediaries shall possess appropriate knowledge and ability, as determined by the home Member State of the intermediary.
Insurance and reinsurance intermediaries shall be of good repute. As a minimum, they shall have a clean police record or any other national equivalent in relation to serious criminal offences linked to crimes against property or other crimes related to financial activities and they should not have previously been declared bankrupt, unless they have been rehabilitated in accordance with national law.
Insurance and reinsurance intermediaries shall hold professional indemnity insurance covering the whole territory of the Community or some other comparable guarantee against

EUR1 000 000 applying to each claim and in aggregate
EUR1 500 000 per year for all claims, unless such insurance

intermediaries shall have financial capacity amounting, on a permanent basis, to 4 % of the sum of annual premiums received, subject to a minimum of EUR 15 000. The amounts shall be reviewed regularly in order to take account of changes in the European Index of Consumer Prices as published by Eurostat.

Source: EIOPA

127. The CBR may consider the IAIS recommendations with regard to intermediaries' licensing or registration:

[22] Directive 2002/92/EC of the European Parliament and of the Council of 9 December 2002 on insurance mediation; and Directive (EU) 2016/97 of the European Parliament and of the Council of 20 January 2016 on insurance distribution

Figure 13: Characteristics of intermediaries' licenses and registrations

Licenses	*Registrations*
License = administrative permission to act as an intermediary. Requirements to obtain a license: • Prior inscription in the register • Adequate know-how, based on the approved official program, tested by exam • Legal qualification to conduct business • In the case of a legal entity, inscription in the corresponding public register, with insurance intermediation as the principal business activity • Integrity. In addition to the above requirements, independent intermediaries must also show: • Financial solvency • Civil liability insurance • Presentation of business plan, structure, resources, income and expenditure projections, training, and the like.	Registration = inscription in the public register or roster of intermediaries. Requirements for registration: • An agency contract with an insurer • Certification by the insurer of qualification, training, competence, integrity, and nonexistence of a criminal record or disqualification • In the case of a legal entity, an analysis of the composition of equity capital.

Source: IAIS

128. Intermediaries' professional criteria vary significantly by country. Examples of requirements include:

a) Managers of an intermediary must meet more stringent qualification standards than their employees do;

b) Intermediaries must ensure that their employees are competent to perform the activities in which they are engaged;

c) Intermediaries working with personal lines must successfully complete certain courses given by recognized training institutes or pass an examination.

129. The CBR may follow the example of many markets which require intermediaries, particularly those dealing with personal lines of business, to be familiar with the following subjects before beginning activities that involve contact with clients:

a) Insurance techniques (the insurance contract and the technical foundations of insurance);

b) Sales techniques including market research, making contact, interviewing, identifying and confirming requirements, offer, closure, signature of contracts, delivering the policy, post-sale services;

c) Attending to and assisting clients in person and by phone, handling complaints and claims, active listening (feedback, agreement, commitment, and the like);

d) Legal requirements governing data protection;

e) Basic computer skills (Microsoft Windows and Office);

f) Basic technical features of the various insurance lines (motor vehicles, comprehensive risks, accidents, health, life, pension plans and funds, and insured savings plans) and local tax, financial, and social security laws;

g) Local marketing practices and requirements.

130. Besides the technical expertise in insurance, insurance brokers need to also have some generic economic knowledge pertaining to (a) legal requirements for establishing and operating a business and complying with tax obligations; (b) accounting principles and bookkeeping, profit and loss statements, and closing of accounts; (c) internal operating procedures: computer programs for issuing policies, invoicing, maintaining client portfolios, managing claims, and accounting.

131. Many countries have national—public or private—organizations or institutes dedicated to training insurance professionals and, in particular, intermediaries. These organizations run training programs for intermediaries, some of which have earned international recognition, such as the Chartered Life Underwriter (CLU) and Chartered Property and Casualty Underwriter (CPCU) in the United States and the Insurance Foundation Certificate (IFC) and the International Certificate for Financial Advisors (ICFA) of the Chartered Insurance Institute in the United Kingdom. The technical note recommends the involvement of insurance professional associations in professional training and certification programs.

Figure 14: Training of intermediaries

General training	*Training in products and procedures*	*Training in business management*
• Technical aspects of insurance • Sales techniques • Customer service • Consumer rights • Confidentiality • Basics of information technology • Technical features of the main lines of insurance • Local tax, financial, and social security laws.	• Products marketed by the insurer • Administrative procedures affecting distribution: risk selection, underwriting rules, and the like.	• Legal provisions affecting the business • Tax obligations • Accounting principles • Operational procedures: issuance, billing, portfolio maintenance, claims, accounting, and the like.

Source: IAIS

132. While the regulator is generally not expected to produce an exhaustive, detailed evaluation of the professional competence of intermediaries, it should assess breaches of legal provisions or complaints. In many countries the complaints against intermediaries are submitted to the appropriate department of the insurer or to the broker before the supervisory authority would become involved in the matter. Corrective actions should be proportionate according to the scale of intermediary's misconduct, which comprise the following:

h) Providing the policyholders, insured, beneficiaries, or the insurers with inaccurate or inappropriate information, which may be regarded as a grave breach of general laws and regulations;

i) Providing partial (or biased) information;

j) Conducting practices that are detrimental to the rights of people policyholders, the insured, beneficiaries, or the insurers;

k) Using names reserved for insurers

l) Delegating functions to unauthorized assistants.

Regulatory sanctions or corrective actions can include:

a) Cancellation of license or registration;

b) Temporary suspension from practicing the profession;

c) Publicizing of the conduct constituting a breach of regulations;

d) Fines;

e) Criminal prosecution;

f) Obligation to take training or refresher courses, rehabilitation plans, portfolio transfers, and the like.

133. The government may consider waiving the current VAT tax on brokerage commissions with a view to reducing the consumers' costs of insurance.

Group supervision

134. Supervision of insurers, which are part of a wider group or conglomerate, whether domestic or international, should not be limited to the solo supervision of that insurer. To address the absence of insurance group supervision, the CBR should initially introduce main legal provisions on insurance groups based on the EU directive 2013/34/EU23 and compliant with the current country's legislation. Such provisions shall comprise a) the legal definition of an insurance group; b) the legal forms of the group parent; c) intra-relationships between the group parent and subsidiaries; and c) the legal ground for the consolidation of accounts and calculation of group's solvency. In addition, the regulation should clearly specify the scope of supervision relating to the insurance groups.

Figure 15: EU insurance group definitions

Term	EU definition
Group	means a parent undertaking and all its subsidiary undertakings;
Parent undertaking	means an undertaking which controls one or more subsidiary undertakings;
Subsidiary undertaking'	means an undertaking controlled by a parent undertaking, including any subsidiary undertaking of an ultimate parent undertaking;

[23] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:182:0019:0076:en:PDF

Financial holding undertaking'	means undertakings the sole object of which is to acquire holdings in other undertakings and to manage such holdings and turn them to profit, without involving themselves directly or indirectly in the management of those undertakings, without prejudice to their rights as shareholders;
Parent undertaking	(a) has a majority of the shareholders' or members' voting rights in another undertaking (a subsidiary undertaking); or
	(b) has the right to appoint or remove a majority of the members of the administrative, management or supervisory body of another undertaking (a subsidiary undertaking) and is at the same time a shareholder in or member of that undertaking;
	(c) has the right to exercise a dominant influence over an undertaking (a subsidiary undertaking) of which it is a shareholder or member, pursuant to a contract entered into with that undertaking or to a provision in its memorandum or articles of association, where the law governing that subsidiary undertaking permits its being subject to such contracts or provisions *(not mandatory to be implemented by EU members).*
Parent undertaking forms	**Description**
Individual Insurer	establishes its subsidiary companies, which are owned by the INSURER (20% or more), not directly by shareholders
Insurance Holding	is established explicitly to invest in insurance companies (with 20% or more), but is not involved in their operations
Joint Venture Insurance Holding	is established through several holdings joined

135. The CBR is further recommended to introduce concepts of group corporate governance, which would clearly specify the responsibilities of the Parent's Board of Directors with regards to group's risk-based solvency and quality of capital commensurate with the risks to which the group is exposed. As recommended by the IAIS[24], the group-wide supervision of insurers which are part of insurance groups or financial conglomerates, should include at a group level adequate policies on the supervision of:

a) Group structure and interrelationships, including ownership and management structure;

b) Capital adequacy;

c) Reinsurance and risk concentration;

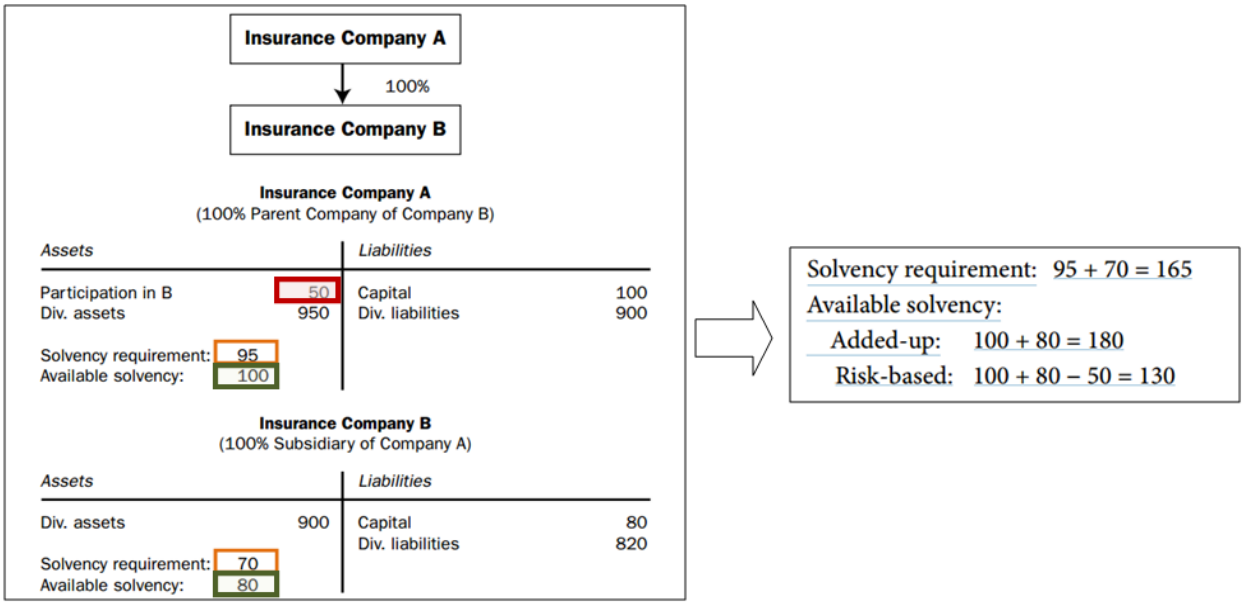
d) Intra-group transactions and exposures, including intra-group guarantees and possible legal liabilities;

e) Internal control mechanisms and risk management processes, including reporting lines and fit and proper testing of senior management.

[24] http://www.iaisweb.org/modules/cciais/assets/files/pdf/061002_ICP_17__Group-wide_Supervision.pdf

136. The example below describes a situation of double gearing based on participations. The participation of insurer A in insurer B in the amount of 50 booked as an asset would lead to the multiple use of own funds. As shown in Figure 16, the capital requirements for the individual entities in this group are met (Company A: 100 vs. 95 required and Company B: 80 vs. 70 required). However, the group solvency takes into consideration the participation of Company A in Company B with an amount of 50 units, which is leveraged twice and needs to be deducted for the purpose of determining the group's risk based solvency.

Figure 16: Group solvency



137. The Solvency II framework provides detailed criteria applying to the supervisory reporting of the groups *(Chapter 6 of the Delegated Regulation: Group Supervisory reporting),* which can be used as a guidance by the CBR to develop group reporting requirements.

Life and health insurance

138. By making employers' contributions to employees' life insurance/endowment plans tax deductible the government may be able to provide a welcome boost to the growth of the domestic life insurance industry. The proposed changes in the tax code should be accompanied by the introduction of clear regulatory requirements on redemption and cancellations of such group policies.

139. Enactment of legislation in support of unit-linked products will be another important step toward improving the growth prospects of the Russian life insurance sector.

140. The introduction of amendments to the current legislation that would create a legal space for private medical insurance coverage by clearly defining the types and amounts of medical services provided under the state sponsored system of free medical care.

CMTPL

141. With the planned shift toward risk-based supervision, there is a considerable upside potential in the gradual liberalization of the regulated MTPL insurance tariffs, which currently may not sufficient to cover insurers' costs of claims. To bring CMTPL insurance tariffs in line with the costs of claims, the CBR should consider gradually liberalizing premium tariffs subject to introduction of actuarially sound claims reserving standards by CBR. The planned introduction of the IFRS requirements in 2018 for the insurance market, actuarially based setting of IBNR reserves and their proper reflection in the calculation of insurers' solvency margin will lay the minimum groundwork for the consequent liberalization of CMTPL tariffs. If properly implemented, such a measure will help with improving the claims performance and profitability of the industry.

142. To reduce the incidence of fraud in the insurance sector, the CBR may consider creating a special anti-insurance fraud unit which will provide guidance (recommendations) to insurers on the most prevalent forms of insurance fraud and ways to combat it. It should also require insurers to introduce internal fraud control systems as part of overall regulatory compliance requirements.

143. To address the growing costs of CMTPL claims due to frivolous law suits initiated by professional liability lawyers CBR should also develop regulatory requirements for the CMTPL minimum claims settlement standards relating to both material and non-material damages that can be equally applied by insurance companies and courts.

Alternative dispute resolution

144. Establishing the role of insurance (or financial) ombudsman may be considered as an option to sort out a good part of individual complaints that consumers and insurers are not able to resolve themselves. While the UK[25] has a centralized model, Germany[26] applies a more relaxed dispute resolution approach (ADR), based on which entities or individuals are authorized to sort out complaints relating to insurers which are allocated to them by BAFIN, which receives the complaints from consumers. The European Community has created an ADR mechanism for disputes involving insurance and other financial services. Called FIN-NET[27], this mechanism provides a well-structured network of procedures for the swift, fair, and efficient

[25] http://www.financial-ombudsman.org.uk/default.htm

[26]http://www.bafin.de/EN/Verbraucher/BeschwerdenAnsprechpartner/Ansprechpartner/Finanzombudsstellen/finanzombudsstellen_artikel_en.html

[27] http://ec.europa.eu/finance/fin-net/index_en.htm

redress of cross-border consumer disputes, including a printed guide that advises consumers how to file a complaint in the FIN-NET system.

145. Regardless of the sponsoring body, most ADR methods involve the expertise of a neutral party knowledgeable in the type of issues that are under dispute. The neutral party, often an ombudsperson, renders a finding or decision after hearing both sides argue their cases. Despite the model, the establishment of the insurance (or financial) ombudsman function would need to be preceded by the necessary legislation for the ombudsman institution. The EU guidelines[28] may be considered to enhancing the current regulation related to the handling of complaints by the insurers.

Agricultural insurance

146. With agricultural insurance accounting for only about 2 percent of non-life insurance premiums in Russia, introduction of compulsory agricultural insurance for all farmers receiving government agricultural production subsidies may be a simple practical way to increase the level of insurance coverage in rural areas.

147. The demand for agricultural insurance will remain low for as long as uninsured farmers are compensated by the federal budget at similar levels with those who are insured. To this effect, the government may consider reducing the level of compensation for uninsured to a fraction of compensation payable to the insured farmers. Similar restrictions can be imposed on government post disaster aid to homeowners uninsured against fire and natural disasters.

Reinsurance capacity

148. Instead of creating the NRC the CBR should consider an alternative market-based approach to securing additional reinsurance capacity, which may be as follows:

a) For industrial and military risks located in Russia one approach would be to create a national special risks reinsurance pool (owned and managed by the industry) with participation of all domestic players contributing capacity relative to their overall share of the market in terms of turnover and equity. Currently the industry seems to be relatively well capitalized (about USD 5.4 billion equivalent) and can certainly afford to allocate a part of underutilized capacity to the national special risks pool.

b) To supplement its reinsurance capacity, the pool can seek alternative reinsurance capacity by issuing insurance linked securities (ILS) either in the domestic or international capital markets. A legislation providing for the issuance of ILS will have to be prepared. ILS can

[28] https://eiopa.europa.eu/Publications/Guidelines/EIOPA_Complaints_Handling_GL_EN.PDF

become a welcome supplement to the existing limited spectrum of fixed income investment instruments available to domestic institutional investors.

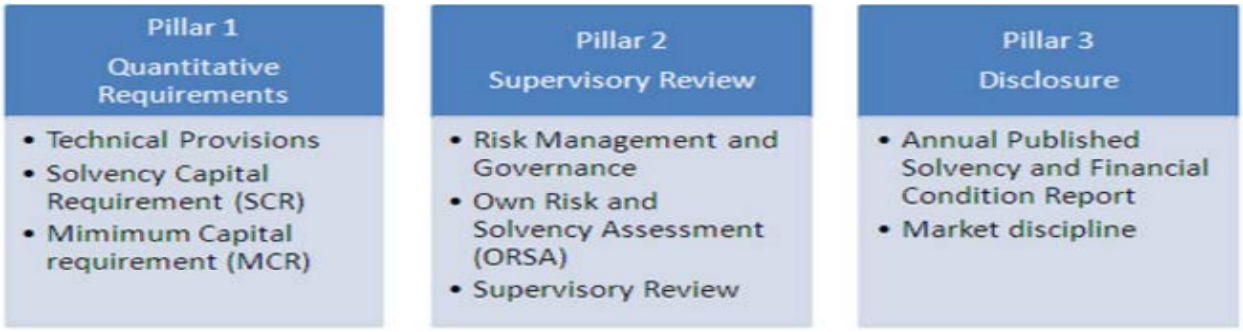
Developers' liability to third parties for unfinished but prepaid construction

149. The problem should be addressed through a combination of measures which may include but not limited to (a) the establishment of housing buyers' guarantee fund to be funded by developers' mandatory contributions (set as a percent of their annual taxable profit) into a dedicated account which can only be accessed upon the CBR's approval; and (b) introducing tighter regulatory and supervisory requirements for the developers' mutual company, which is currently ill-equipped to pay claims in cases of even mid-severity defaults.

Moving towards solvency II

150. The objective of EU solvency II is to establish risk based capital requirements consistent with the insurer's individual risk-profile determined through a fair valuation of assets and liabilities and permitting a timely scaled intervention. The Solvency II framework consists of three main regulatory building blocks, which are designed to be mutually reinforcing. Pillar 1 consists of the quantitative requirements (i.e. how much capital an insurer should hold). Pillar 2 sets out requirements for the governance and risk management of insurers, as well as for the effective supervision of insurers. The focus of Pillar 3 is market disclosure and transparency requirements.

Figure 17: EU Solvency II pillars



151. The EU Solvency II requirements add new responsibilities for all stakeholders including insurance companies (senior management, board etc.) and the regulator (sufficient expertise and capacity) in order to ensure compliance with the principles of risk-based solvency supervision. To move towards this complex regulatory approach, the CBR should develop a clear roadmap by identifying most important milestones towards its implementation. While the key building blocks are provided by the Solvency II Directive, the roadmap should be drawn up based on the current conditions of the insurance sector in the Russian Federation with a view to assisting the insurance sector identify the areas in which they should focus their

implementation efforts over the transitional phase until the introduction of the Solvency II approach. Schematically, a gradual transition toward risk-based Solvency II like supervision is likely to entail the following actions:

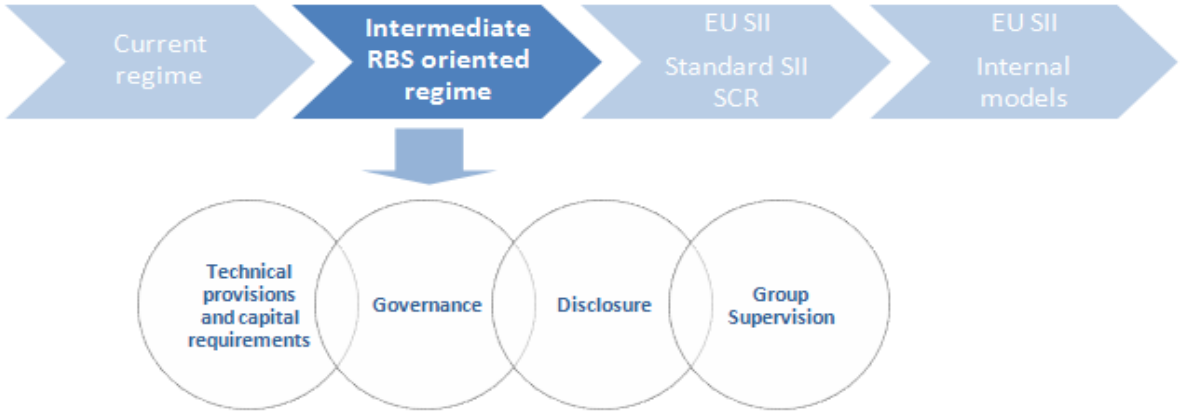
a) Changes to the valuation of technical provisions and capital requirements (EU SII Pillar 1);

b) Changes to the system of governance, including: corporate governance, internal controls, and risk management requirements (EU SII Pillar 2);

c) New disclosure (reporting) requirements (EU SII Pillar 3);

d) Introduction of insurance group regulations.

Figure 18: Intermediate steps to risk based supervision



Changes to the valuation of technical provisions and capital requirements (EU SII Pillar 1)

152. To move from a simple rule-based approach to a more risk-based solvency approach, the CBR may consider intermediate quantitative measures which would require setting up more prudent solvency requirements. Such measures should be established within reasonable time-frames through transparent consultations with the insurance market, which should become aware of the potential impacts to their business operations. To develop the road map toward the EU Solvency II like supervisory regime, the CBR should undertake a thorough assessment of different segments of insurance sector based on premium volume and risk profile breakdowns. For illustrative purposes, a generic set of intermediate measures is provided below based on the IAIS ICP assessment.

a) As explicitly recommended in the IAIS ICP assessment, the intermediate measures should comprise setting up actuarial reserving requirements for (re) insurers and further using the actuarially set reserves for the calculation of the regulatory solvency. More advanced steps shall address the requirements set by the EU Solvency II with regards to the prospective valuation of liabilities and the approach to the calculation of the risk margin on the top of 'insurance best estimates'.

b) The CBR should set up prudent requirements with regard to the completeness, accuracy and granularity of the data used for reserving calculation. Such requirements should also take into account the types and granularity of the data required to carry out the solvency calculations under the EU Solvency II regime.

c) Considering the potential impact of the natural disaster risks on the insurers' solvency capital, the CBR may also consider introducing specific requirements relating to the insurers' net retentions relative to the catastrophe risks (both natural and manmade) written in their books based on the EU Solvency II requirements. Such requirements can be further tailored on the basis of industry disaster risk exposure date, which allow to carry out a more granular (more accurate) calculation of the catastrophe risks.

d) While the solvency capital requirement reflects the level of capital that enables the insurer to absorb significant unforeseen losses and provide reasonable assurances to policyholders and beneficiaries, EU Solvency II also requires the insurers to comply with the Minimum Capital Requirements (MCR) as an additional safety net for their operations. Compliance with the EU Solvency II approach will also require setting MCR requirements similar to the EU level. As an intermediate approach, the CBR may require mid-size and large companies to comply with the EU level of the MCR requirement.

e) While the aforementioned intermediate steps concentrate mainly on the liabilities side (i.e. insurance risks), Solvency II also takes into account risks on the asset-side. The new approach will be a 'total balance sheet' type regime where all the risks and their interactions are considered. In particular, insurers are not required to hold capital against market risk (i.e. fall in the value of insurers' investments), credit risk (e.g. when third parties cannot repay their debts) and operational risk (e.g. risk of systems breaking down or malpractice). Intermediate requirements should be established to assess these risks and take them into account for the solvency capital calculation. To this effect, the CBR may require the calculation of reinsurance credit risk based on a similar approach to EU Solvency II and further deduct it from the reinsurance assets which are taken into account for the solvency calculation purpose. Additional requirements can be established with regards to the measurements of other types of risks. However, in the process of transition toward the risk-based supervision, the CBR should ensure that the new requirements apply only if the risks can be measured properly in practice (e.g., the interest rate volatility, price volatility, exchange volatility, asset/liability mismatch risk, reinvestment risk, value of derivative instruments). To this effect, the CBR may decide to keep in place (at least in the near future) its investment rules which are subject to quantitative restrictions for the assets covering the solvency and insurance reserves rather than switching to the EU Solvency II type regime which does not differentiate between different types of assets.

Changes to the system of governance (EU SII Pillar 2)

153. Although the EU Solvency II regime is more known for (a) the introduction of a risk-sensitive solvency requirements and (b) the adoption of the 'total balance sheet' approach

to measure the insurers' solvency, it is worth pointing out that the EU Solvency II does not view capital as the only (or the best) way to mitigate against the risk of insurers' failures. The Solvency II requires insurers to dedicate considerable resources to the identification, measurement and proactive management of risks. To abide by this approach, the CBR should establish a sound corporate governance and risk management framework.[29] The implementation of enhanced requirements in these areas should be preceded by the issuance of principles-based guidance concerning: (a) governance; (b) internal controls; (d) risk management and (e) stress testing. Based on the EU Solvency II requirements, the CBR should develop adequate supervision mechanisms to obtain early warnings of potential solvency concerns and obtain sufficient powers to intervene in cases of manifest breaches. To this effect, the CBR should require insurers to maintain the following governance systems:

i. General governance
ii. Fit and proper requirements
iii. Risk management system
iv. Internal control
v. Internal audit
vi. Actuarial function
vii. Outsourcing

Based on the principle of proportionality, the systems of governance and risk management should be commensurate with the nature, scale and complexity of risks.

154. Intermediate guidelines should be developed on stress testing to determine the effect on statutory capital of risks materializing under plausible but extreme scenarios. The guidelines should be discussed with the market prior their implementation. Finally, the introduction of own internal risk models requires the insurers to have these complex models embedded in the day-to-day running of the business, whereas the regulator should have adequate expertise to understand, approve and monitor the models. To this effect, the introduction of own internal models can happen only when both the market and the CBR are technically prepared to face the challenge.

155. While Solvency II does not set out explicit requirements with regards to the automation of processes or the management systems, it notes that the benefits of improving these areas would greatly assist companies with meeting numerous regulatory and internal operational requirements. To this effect, in line with the new data requirements outlined in the previous section, the CBR should also require insurers (within the intermediate phase) to establish

[29] Please see respective paragraphs relating to corporate governance and risk management

management information systems with sufficient capabilities to collect, maintain and process the data required for the valuation of insurance liabilities and other balance-sheet items.

156. The EU directive requires supervisors to evaluate insurers' compliance with the laws, regulations and administrative provisions adopted pursuant to the Solvency II directive and its implementing measures. The new rules require insurers to disclose certain information publicly to a far greater extent than currently is the case. As part of Pillar 3 of Solvency II, the insurers (including insurance groups) are required to submit the Confidential Report to Supervisor (RTS) with detailed technical and financial information.

Market disclosure

157. The EU requires insurers to publish their Solvency and Financial Condition Report (SFCR), which may provide capital management details, including any material breaches of the minimum capital requirement and solvency capital requirements. Other information that may be required to be disclosed includes:

a) The basis of and valuation methods for assets and technical provisions, including any significant differences between those presented in the financial statements.
b) A description of the risk exposure, concentration, and mitigation for each risk category.
c) Financial performance.
d) Governance.
e) Certification of compliance with investment requirements.

Within these intermediate steps, the CBR should introduce similar requirements for public disclosure.

Group supervision under the EU Solvency II

158. The EU Solvency II framework has strengthened the role of the group supervisor who will have specific responsibilities to be exercised in close cooperation with the solo supervisors. This will mean that the same economic risk-based approach applying to solo insurers should be applied to insurance groups which can then be better managed as a single economic entity.

159. The CBR supervises insurers on a solo basis, as no group legislation presently exists. Interim measures for the supervision of insurance groups in the Russian Federation should be introduced since a number of insurers are currently operating within a group structure. Being part of a group poses a range of risks to an insurer, including direct or indirect risk exposures to other group entities, conflicts of interest, and inadequate risk assessment. The recent global

financial crisis has demonstrated that the failure of one entity within a financial structure may damage, or even cause the failure of related entities.

160. To this effect, the CBR intermediate measures should comprise the development of supervision requirements at the group level, which should empower the CBR to carry out the group supervision and determine the supervisory process of insurance groups. The EU Solvency II provides for two different methods to assess the group solvency based on the financial data of all group participants, namely (i) the accounting consolidation-based method and (ii) the deduction and aggregation method. The first method treats the group as a single economic entity, whereas the second accounts for the diversification effects calculated at the individual member level, but not at a group level.

Final remark: Economic assessment of the new approach

161. The CBR should carry out an assessment of the economic impact of the new supervision approach on individual insurance companies and the insurance market as a whole. To this effect, the regulatory changes should be preceded by initial surveys of their expected potential impact (including costs of compliance) on the industry as a whole and specific segments of the industry in particular**.**

Annex 1: Ladder of Intervention Followed by the Office of the Superintendent of Financial Institutions Canada (OSFI)[30]

Stage and circumstances	OFSI activity
No problem, normal activities	
Ongoing supervisory and regulatory activities applying to all federally regulated Canadian and foreign life and property and casualty insurance companies, pursuant to OSFI's mandate; in addition, OSFI conducts research and analyzes industry-wide issues and trends	a) Incorporate new Canadian companies and issue orders to carry on business to Canadian and foreign companies: (a) review and assess all relevant documents and information and (b) make recommendations to minister b) Review and assess a wide range of applications and requests for regulatory consent required by statute, including (a) corporate reorganizations, (b) changes in ownership, (c) acquisitions of other financial institutions, (d) transfers of business, (e) changes in classes of insured risks, and (f) withdrawals from the Canadian insurance market c) Monitor companies based on information obtained from statutory filings, financial reports, and other sources: (a) assess financial condition and operating performance, d) (b) verify compliance with statutory and other regulatory requirements, (c) conduct periodic onsite examinations of companies as required by statute, (d) inform management and board of directors of findings, (e) request that management provide a copy of report to external auditors, (f) require that concerns be addressed by the company, (g) monitor remedial measures, if required, and (h) inform the minister of the status of companies.
Stage 1: Early warning	

[30] ICP 14: Preventive and Corrective Measures of the Supervisor_ A Core Curriculum for Insurance Supervisors

Deficiency in policies or procedures or the existence of other practices, conditions, and circumstances that could lead to the development of problems described at stage 2; situation can be remedied before it deteriorates into a stage 2 problem	a) Notify the company of concerns and request it to take measures to rectify situation b) Monitor remedial actions, requesting additional information or conducting follow-up examinations, as needed c) Require the company's external auditor to enlarge the scope of examination of the company's financial statements or to perform other procedures and prepare a report thereon, as needed; assign the costs of the external auditor's work to the company, as appropriate d) Require an external review of the company's actuarial methods and assumptions, as needed
Stage 2: Risk to financial viability or solvency	
Situations or problems that, although not serious enough to present an immediate threat to financial viability or solvency, could deteriorate into serious problems if not addressed promptly, as evidenced by (a) concerns over the company's ability to meet capital and surplus, or vesting, requirements on an ongoing basis, (b) poor earnings, operating losses, or deterioration in the profitability of the company's business, (c) concerns regarding appropriateness of actuarial reserves, (d) undue exposure to off-balance-sheet risk, (e) low level of accessible liquidity or poor liquidity management in the context of the company's situation, (f) less than satisfactory management quality or deficiency in management procedures or controls (including material breaches of applicable standards of sound business and financial practices), and (g) other concerns arising from a financially weak or troubled owner, noncompliance with regulatory requirements, systemic issues such as exposure to major insurance catastrophes, rapid growth, credit-rating downgrades, qualified report of external auditor or appointed actuary, increased risk exposure as identified by dynamic capital adequacy testing or the business plan	a) Have senior OSFI officials meet with the company's management, board of directors, and external auditor to outline concerns and discuss remedial actions b) Have the company provide an acceptable business plan that reflects appropriate remedial measures that will rectify problems within a specified time frame c) Enhance monitoring of the company by requiring more frequent reporting and more detailed information d) Monitor progress of remedial measures via reporting requirements, follow-up examinations, or both e) Enlarge the scope and increase the frequency of onsite examination f) Require the external auditor of the company to perform a particular examination relating to the adequacy of the company's procedures for the safety of its creditors, shareholders, and policyholders or any other examination that may be required in the public interest and to report the results to OSFI; assign the costs of the external auditor's work to the company, as appropriate g) Require an external actuary to review the appropriateness of the company's actuarial reserves; assign the costs of the external actuary's work to the company, as appropriate h) Direct the company to modify its actuarial assumptions and methods i) Impose business restrictions appropriate to circumstances via undertakings provided by the company, restrictions on the company's order to carry on business, or direction of compliance covering matters such as payments of dividends or management fees, lending or investment powers, level of indebtedness, business acquisitions, yield offered on annuity products, level of premiums, and other restrictions tailored to circumstances

	j) Place the company on a regulatory watch list and notify management and the board of directors formally k) Send a watch list progress report at least monthly to the minister; discuss the report in regular meetings with the minister l) Discuss the status of the company with the relevant compensation fund and with provincial insurance regulators m) Discuss the company at the Financial Institutions Supervisory Committee n) Commence contingency planning
Stage 3: Future financial viability in serious doubt	
Situations or problems described at stage 2 that pose a material threat to future financial viability or solvency unless effective corrective measures are applied promptly	a) Inform the company's management, board of directors, and external auditor of problems b) Ensure that the business plan reflects appropriate remedial measures that will rectify problems within a set time frame so as to avoid triggering impaired viability or impaired solvency procedures (see stage 4) c) Further enhance monitoring of the company by requiring more frequent reporting and more detailed information d) Carry out follow-up examinations, as required e) Carry out enhanced examinations focusing on particular areas of concern, such as asset or loan security valuations or the determination of actuarial reserves. Such examinations may involve any of the following: (a) substantial increase in sampling of credit files, (b) more in-depth reviews of files, (c) engagement of specialists or professionals to assess certain areas, such as quality of loan security, asset values, and appropriateness of actuarial reserves. f) Depending on the situation, post OSFI examination staff at the company to monitor the situation on an ongoing basis g) Require a special audit from an auditor other than the company's own external auditor if OSFI is of the opinion that it is necessary; assign the cost of the external auditor's work to the company, as appropriate h) Require a special review of the company's actuarial reserves from an external or independent actuary to assess the adequacy of reserves under the circumstances; assign the cost of the actuary's work to the company, as appropriate i) Direct the company to increase its capital or assets in Canada

	j) Depending on the circumstances, enhance existing business restrictions or impose additional ones on the company k) Depending on the circumstances, exert pressure on management and the board of directors to restructure the company or seek out an appropriate prospective purchaser l) Develop a contingency plan for taking rapid control of the assets of the company if changes in circumstances so warrant
Stage 4: Company not viable or insolvency imminent	
Severe financial difficulties resulting in one of the following: (a) failure, or imminent failure, of the company to meet capital and surplus requirements or vesting requirements in conjunction with inability to rectify the situation within a short period time, (b) statutory conditions for taking control having been met, or (c) failure of the company to develop and implement an acceptable business plan, thus making either of the two preceding circumstances inevitable within a short period of time	a) Exert pressure on management and the board of directors to rectify the situation through frequent meetings with senior OSFI officials b) Notify management and the board of directors of the company of regulatory intervention measures that will be taken unless situation is rectified quickly c) Impose new business restrictions on the company or expand existing restrictions d) Formally notify the board of the compensation fund of the situation and of proposed regulatory intervention measures (have senior OSFI officials meet with the board of the compensation fund to discuss the situation) e) Notify other relevant regulatory agencies (provincial or foreign) of the proposed regulatory intervention measures to be applied to the company f) If statutory conditions for taking control of assets exist and if there is an immediate threat to the safety of policyholders and creditors, take control of the assets of the company for a short period g) If statutory conditions exist, such as failure to comply with a direction to increase capital or assets in Canada, and representations are made to the superintendent, maintain control of assets or take control of the company h) Seek a winding-up order, pursuant to the Winding-up Act, either voluntarily by the company or by OFSI (the minister may overrule this decision on grounds of public interest only).