## Off-site Supervision and Early Warning Systems



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2<sup>nd</sup> International Insurance Supervision Seminar on
Core Supervisory Issues

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#### 1. Introduction

- 2. The Insurance core principles
- 3. Assessing capital adequacy and regulatory compliance
- 4. Prudential reporting
  - Frequency and types of information
- 5. Processing and risk assessment
- 6. Structured early warning systems



#### 1. Introduction

- Risk based supervision
  - Planning and execution of supervisory activities are influenced by an evaluation of the probabilities and/or impact of noncompliance with legislation
  - Depend on the systemic importance, nature, scale and complexity of the business (proportionality)
  - Allows for prioritisation of supervisory activities



#### 1. Introduction

- Supervisory methods
  - Off-site supervision
  - On-site inspections



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Contents	ICPs
5. Ongoing supervision	ICP 11: Market analysis
	ICP 12: Reporting to supervisors and off-site monitoring
	ICP 13: On-site inspection
	ICP 14: Preventive and corrective measures
	ICP 15: Enforcement or sanctions
	ICP 16: Winding-up or exit from the market
	ICP 17: Group-wide supervision



- Insurance core principle 12
  - The supervisory authority receives necessary information:
    - to conduct effective off-site monitoring
    - to evaluate the condition of each insurer as well as the insurance market



#### ICP 12, Essential criteria

- The supervisor:
  - Sets requirements for scope and frequency of financial and other information
  - Requires audit reports
  - Should not distort the market in favour of or against any particular form of enterprise
  - Sets additional information requirements when needed
  - Requires solo and group wide information



#### ICP 12, Essential criteria

- The supervisor requires information:
  - On financial condition and performance
  - On off-balance exposures
  - On outsourced functions



#### ICP 12 Essential criteria

- The supervisor requires
  - Responsibility of senior management
  - Correction of any inaccurate information and impose sanctions for deliberate misreporting
- The supervisor maintains a framework for on-going monitoring



#### ICP 12, Advanced criteria

- The supervisor regularly reviews reporting requirements
- The supervisor requires insurers to report promptly material changes that affect the evaluation of their condition



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# 3. Assessing capital adequacy and regulatory compliance

Purpose of off-site (and on-site) supervision

- Protecting policyholders and beneficiaries
- Issuing licenses and monitoring that conditions for the license are met
- Evaluating the risk profile and the capital strength of insurers
- Evaluating insurers' compliance with legislation and taking remedial action



# 3. Assessing capital adequacy and regulatory compliance

- Most supervisory work done off-site
- Cost efficient
- Allows for comparisons
- The assessment should include cooperation with other supervisors where relevant



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#### Off-site supervision is based on

- Regular reporting
- Ad hoc reporting
- Applications
- Market information
- Other ad hoc information





- Reporting should allow supervisors to assess
  - The risk profile
    - Underwriting risk
    - Market risk
    - Credit risk
    - Operational risk
    - Liquidity risk
  - The capital strength
  - The organisation
  - Processes and procedures
  - The business



#### Example of reporting requirements

- Regular reports
  - Annually:
    - Annual accounts and annual report (statutory and supervisory)
    - Auditors report (external and internal auditor)
    - Paid claims provisions
  - Biannually:
    - Accounts
    - Capital and risks (e.g. stress testing)



- Regular reports
  - Quarterly:
    - Insurance provisions and assets
    - Business plans and quarterly accounts for newly licensed companies
    - Reinsurance cover Annually
    - Liquidity reports ad hoc
    - Actuarial statement and report Annually



- Applications
  - New licenses and change of licenses
  - Fit and proper
  - Exemptions (prior approvals)
- Market and other ad hoc information
  - Consumer complaints
  - News in the press
  - Rumors



- Audit reports may provide information on
  - Auditors' observations
  - Compliance with reporting requirements
  - Accounting procedures and internal controls
  - Any non-compliance with legislation
  - The adequacy of internal guidelines and procedures
  - Compliance with internal guidelines and procedures
  - Group relations and intra-group transactions
  - The reinsurance programme and reinsurance settlement procedures
  - Technical provisions
  - Etc.



- Manual/computerised reporting
- Manual/computerised storing
- Set format for regular reporting
- Publicly available information/supervisory reporting
- Should allow for comparison over time and for benchmarking



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#### Line officer

- Each insurance company may be assigned a line officer
- The line officer performs the risk assessment
- He/she may draw on in house expertise
- The line officer may also perform on-site inspections



#### Risk assessment

- Assessment of the overall risk profile and capital strength of all insurers should be made at least once a year
- and ad hoc as necessary
- Based on reported information
- To be used in prioritising of supervisory activities



- Tools for risk assessments
  - Internal ratings using predefined criteria covering all major risk areas, including
    - The insurance business
    - Assets
    - Reinsurance
    - Profitability
    - Solvency
  - Standardised stress tests
  - Benchmarking
  - Exception reporting
  - Subjective evaluation by line officer



- Supervisory action following the risk assessment
  - Require more information
  - Provide risk information
  - Meeting with board of directors and/or management
  - Meeting with auditors
  - Require auditors to report on specific matters
  - On-site inspection
  - Require more frequent reporting
  - Require the insurer to adapt the risk profile
  - Require other corrective action
  - Ultimately, withdraw license



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- Signal that the insurer is or may shortly be breaching key financial parameters
- Should be interpreted in the light of the whole situation of the insurer
- Early warning systems include stress testing, sensitivity analysis and scenario analysis conducted by insurers
- Standardised stress tests may be used for benchmarking purposes
- Automated exception reporting



- Quantitative early warning indicators
  - Low capital strength relative to the risk profile (underwriting, provisioning, reinsurance, market, credit and operational risk)
  - Rapid growth
  - Declining profitability
  - High expenses and low profitability
  - Sudden increase in technical provisions
  - Dramatic decrease in technical provisions
  - Significant divergence from budgets and business plans
  - Concentrated investments, particularly in related entities
  - Consumer or intermediary complaints



- Qualitative early warning indicators
  - Change in strategy
  - Changes to or delays in implementing business plan
  - New classes of business/sources of business
  - Crude underwriting strategy (pricing and risk selection)
  - Failure to implement supervisory requirements
  - Non-cooperation with supervisor
  - Delays in producing supervisory information



- More qualitative early warning indicators
  - Poor quality information
  - Poor response to audit reports or management letters
  - Vulnerability to legal or fiscal changes
  - Mergers or acquisitions
  - Reinsurance arrangements inconsistent with normal practice or with unclear rationale
  - Excessive bonus or unusual remuneration or incentives



- Example of stress testing for non-life (to identify potential problems)
  - Cat cover
    - Catastrophe scenario for a severe windstorm (or other scenario of a catastrophe that may happen in your country)
    - The estimated loss may be compared with the storm cover, if reported to the supervisor, or the loss may be compared to the solvency surplus



- Example of stress testing for non-life (to identify potential problems) (cont.)
  - Claims provisions
    - Stress the claims provisions by estimating the expenses related to already incurred claims
      - The calculations can be based on different actuarial triangle methods
    - Stress the claims provisions by calculating the effect of a 10 % rise in the average size of claims
    - Stress the claims provisions by calculating the effect of a rise in the number of claims by 10%



- Example of stress testing for life (to identify potential problems)
  - Biometric risks
    - Evaluate changes in assumed longevity and disability intensity
    - Change (decrease/increase) in the mortality intensity of 10 per cent. It corresponds very roughly to change in longevity of 1 year.
    - Increase in the disability intensity of 10 per cent.



- Example of stress testing for assets
  - 12 % stock price decrease
  - 0,7 per cent point change in long term interest rates
  - 8 % real estate decrease
  - Currency risk, credit risk and counterparty risk
  - 30 % stock price decrease
  - 1 per cent point change in long term interest rates
  - 12 % real estate decrease
  - Currency risk, credit risk and counterparty risk
  - The first scenario "corresponds" roughly to the capital requirement of a bank with identical investments
  - The second scenario is an early warning indicator



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Any questions?

