

NIRA m.a.

**Solvency and Financial Condition
Report (“SFCR”)**

Version 2019



Solvency and Financial Condition Report (“SFCR”)

The new, harmonised EU-wide regulatory regime, known as Solvency II, came into force with effect from 1 January 2016. The regime requires new reporting and public disclosure arrangements to be put in place by insurers and some of them are required to be made public. This document is the first version of the Solvency and Financial Condition Report (“SFCR”) and will be made public on the NIRA website.

The SFCR covers the Business and Performance of NIRA, its system of Governance, Risk Profile, Valuation for Solvency Purposes and Capital Management. NIRA is required to hold sufficient assets to match its liabilities at all times while at the same time be committed to high governance standards. A primary responsibility of the Board is to ensure that eligible capital is adequate to cover the required solvency for the nature and scale of the business.

28/06/2019

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1. Membership structure

Principle: Mission and Vision

Nuclear Industry Reinsurance Association (NIRA m.a.) is the first mutual reinsurance association in the Grand Duchy of Luxembourg. NIRA is committed to reinsure both the material damage and nuclear third-party liability risks of its Members and any (re)insurance company willing to contract reinsurance with NIRA for as long as the underlying insured risks concern nuclear and / or conventional energy risks. NIRA is a non-profit-driven organization.

NIRA reinsures energy risks worldwide, covering loss arising from material damages included CAR/EAR and MB on the one hand and nuclear third-party liability on the other hand. As a reinsurer, NIRA writes its business predominantly in direct collaboration with the primary insurers. This can include business offered to NIRA by industrial members through their captives or risk retention groups.

Principle: Acceptance of Members

Only companies or authorities in the private or public sector of operating / controlling / owning / (re)insuring nuclear installations and/or conventional energy installations or their representatives can be member of the Association.

Principle: Adequacy of Members

Each of NIRA's voting Members is an important player on the international energy market and is therefore submitted to intensive surveillance by national and international authorities. Due to their size and (self)-control, NIRA considers its voting Members as being reliable and financially sound. As NIRA is a mutual that does not apply supplementary contributions, no special call exposure policy is applicable. The assessment of a candidate voting Member, effectuated by the Engineers of the ceding companies, is also used in the NIRA membership process.

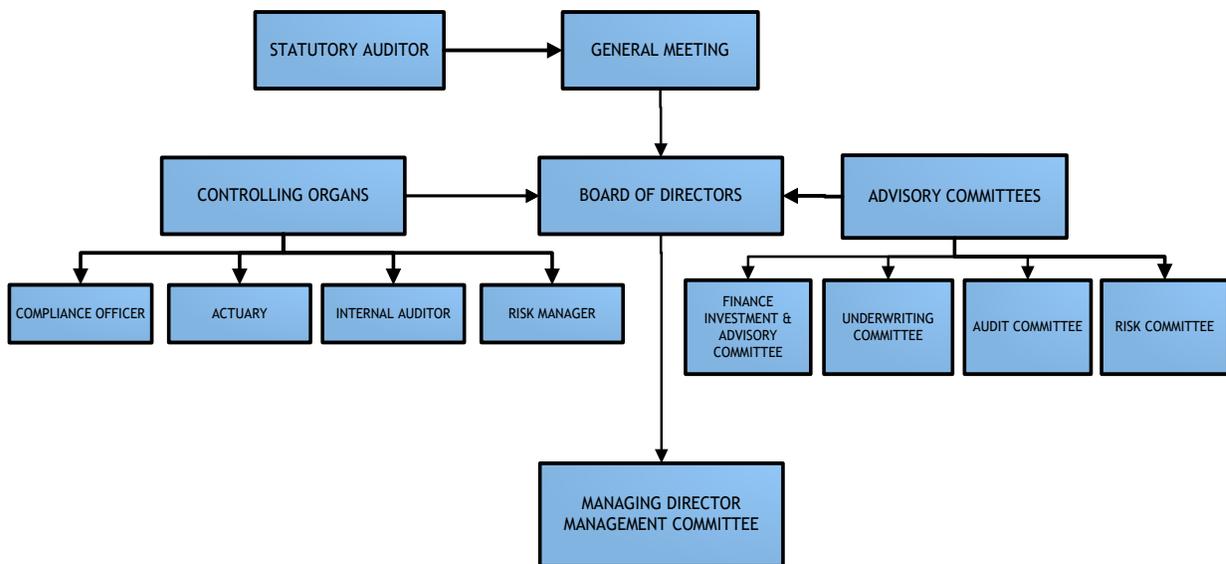
Membership is submitted to the Board of Directors and becomes effective after approval by General Meeting. New voting Members have to contribute to a sound and prudent management in NIRA as well as to the stability of the financial institution and its development on a going concern basis.

Every voting Member represents one vote in the Mutual. Non-voting Members have no voting rights. Because every Member is treated equally, there are no controlling Members even though

each Member has got different participations in the funds. A complete list of the Members is published yearly in the annual report and the C.A.A. is informed on a regular basis.

The Annual General Meeting, according to Article 10 of the Articles of Association, must meet on the last Thursday of April in Luxembourg or at any other place fixed by the Board of Directors. Written minutes of the AGM are drafted and adopted during the meeting itself.

2. Management structure, remuneration



Principle: Adequate management structure

In line with the best practice on sound governance; NIRA maintains independency between the supervision of management and the management itself. The supreme management body of the Association is the General Meeting that has delegated its powers to the Board of Directors, who in his turn has entrusted the day-to-day management of the Mutual to the Management Committee.

To enhance efficiency, the Board has set up Advisory Committees in charge of analyzing specific issues. These Committees have only an advising function as the decision-making and risk appetite remains the task of the Board.

General Meeting

The General Meeting is composed of all the Members of the Association. The Annual General Meeting meets annually the last Thursday of April at the registered office in Luxembourg or at any other place fixed by the Board of Directors and designated in the notice convening the meeting.

Additionally, a General Meeting is convened by the Board of Directors when a Members' decision is legally and/or statutory required as described in the Articles of Association.

Board of Directors

The Annual General Meeting nominates the Board of Directors for a three-year period but can dismiss them at any given time. On completion of their three years period of office, Directors shall be eligible for re-appointment. According to the Articles of Association, the Board of Directors is composed out of at least 5 Directors.

The C.A.A. is informed of any new candidates who get (re)nominated and who resign.

Amongst the non-executive Directors following competences are looked for:

- Actuarial / Solvency experience
- Underwriting market experience
- Claims handling experience
- Legal background in relation with (re)insurance legislation and regulations
- Financial / investment background
- Corporate governance background
- Human resources knowledge
- Compliance & audit

Every candidate is assessed before (re)election on the following requirements:

- his/her professional qualifications, knowledge and experience are adequate to enable sound and prudent management (fit);
- he/she is of good repute and integrity (proper).

Directors receive no remuneration for their commitment except the Independent Directors who receive an annual attendance fee. Board members, travelling on NIRA business will be reimbursed for travel expenses according to the Board expense policy.

Non-Executive Directors may have other mandates in other companies. Executive Directors are only authorized to take on additional Non-Executive mandates or other Executive mandates in companies in the insurance sector.

In line with the fit and proper requirements applicable the fit and proper policy, the Board of Directors performs annually a self-assessment.

Management Committee

The Management Committee is entrusted by the Board with the day-to-day management within the framework of the general policy of the Association and in accordance with the laws and regulations in force. The Management Committee is responsible for the execution and management of the outcome of all Board decisions. The Management Committee consists of the entire management. This structure is set up because NIRA is very small in size but it still has a desire to improve its functioning by regular and adequate self-assessment.

The Management Committee is a board acting jointly and collegially. It may delegate various tasks amongst its members, but this shall not detract from the fact that they are jointly and collegially responsible.

Members of the Management Committee receive no additional compensation for their engagement. Every member of the Management Committee is entitled to one vote with casting vote for the Chairman.

Advisory Board Committees

The Board appoints and dismisses the delegated members of the specialized Board Committees in charge of advising the Board: the Financial Investment & Advisory Committee (FIAC), the Audit Committee (AC), the Risk Committee (RC) and the Underwriting Advisory Committee (UAC). The existence of the Committees doesn't decline the overall responsibility of the Board. Board Committees provide advice and support in their field of expertise by making written recommendations towards the Board of Directors.

All Advisory Board Committees have charters that explain their purpose and their role including the responsibilities of the Committee towards the Board of Directors as advisory body. Each Charter is yearly evaluated and when necessary suggestions on amendments to the Committee's Charter are made to the Board for approval.

Committee members are nominated by the Board of Directors for their experience in the specific areas of the Committee they take part in. Every Committee consists of a mix of Board members, representatives of voting members to ensure execution and communication on every level of the Association.

In line with the fit and proper requirements, every Committee performs annually a self-assessment. The self-assessment form is yearly circulated in October in order to enable to report on the outcome to the Committee and the Board of Directors scheduled in March of the next year.

Principle: remuneration

NIRA's overall remuneration system has been designed to deliver compensation, driven by both mutual and individual performance, and according to its Members' interests. The focus will be on and long-term performance and will be aligned to market levels. Our principles are inspired by the Financial Stability Board principles for sound compensation practices.

Board Members as well as Executive Directors receive no remuneration. Only Independent Directors receive a fixed cash amount per year which is approved by the General Meeting for the current financial year. No variable nor incentive programs are included for any Board member.

Members of Advisory Committees receive no additional compensation, fixed or variable, for their contribution to the Mutual.

Actual expenses in connection with Board and Committee meetings are reimbursed.

Members of the Management Committee receive no additional compensation, fixed or variable, for their contribution to the Mutual.

Staff is employed on a contractual basis. Their remuneration is subject to annual reassessment. A desire to ensure that NIRA is able to attract and retain personnel with the best possible qualifications and the existence of sound succession plans have a decisive influence on the remuneration. The compensation package consists of two integrated elements: a base pay and an annual pre-agreed, personalized incentive bonus.

Base salary levels are designed to compensate staff for their responsibilities and their experience. Market levels for comparable positions are targeted for the base pay and the base pay levels are subject to regular reviews.

The annual incentive bonus recognizes and rewards individual performance as well as team performance but is never a substantial proportion of the compensation package. The funding levels for the annual incentive bonus are dependent upon non-financial criteria such as personal development and contribution to an improved Member-relationship. Bonuses are not guaranteed because they are not consistent with the pay-for-performance principle.

Annually, the Managing Director will present the total remuneration package to the Chairman of the Board of Directors for approval. He will conduct an independent review on the suggested bonuses and the proposed compensation policy for the next year.

Key/critical functions that are outsourced will follow the outsourcing policy and the outsourcing process in which a market competitive remuneration assessment is included.

3. Fit & Proper, external functions and internal control

Principle: Fit & Proper

Two standards of evaluation are at the center of the fit and proper policy:

1) Expertise (« fitness »):

A person is considered as being expert ("fit") for a specific function when he / she combines knowledge and experience, skills and the professional behaviour required for the function in question.

2) Professional worthiness (« properness »):

The professional worthiness concerns the honesty and the integrity of a person. A person is considered as professionally honorable ("proper") in the absence of indicating elements the opposite and when there is either no reason for questioning reasonably the good reputation of the person involved. In other words, we can leave the principle that the person will execute in an honest, ethical and integrate way the task which is confided to him (her).

All people occupying critical functions in NIRA are aimed by this policy. By critical function we understand:

- The members of the Board;
- The members of the Management Committee;
- Four key functions defined in the Directive Solvency II: Actuarial, Compliance, Risk Management and Internal Audit Function.
- Any other function which NIRA would estimate as critical for the smooth running of the company either internal or external.

Critical functions should have the necessary professional expertise, the skills and the worthiness to be able to perform their functions. The same requirements apply to the holders of any critical outsourced function.

Principle: Qualities required of the mutual's officers in key functions

It is important that NIRA has officers in key functions that collectively and individually have an adequate profile to lead the Association. NIRA shall notify the C.A.A. in advance of any proposed appointment or dismissal of Mutual officers in key functions. This notification will mention the applicable internal rules. Also, the Association will inform the C.A.A. of any changes in the distribution of tasks among company officers.

Principle: Independent key functions

Key Functions play a critical role in lending independent credibility to statements used by internal and external stakeholders. While any consideration of the effectiveness of the function involves a wide variety of issues, it is fundamental to private and public confidence that the key function operates in an environment that supports objective decision-making on issues that have a material effect. In other words, the key function must be independent in both fact and appearance.

Standards of independence are promoted in NIRA to ensure an environment in which the key function is free of any influence, interest or relationship that might impair professional judgment or objectivity.

The governance structure of NIRA plays an important role in monitoring and safeguarding the independence of key function. The Board of Directors and advisory committees guarantee an environment that permits the key function to carry out its responsibilities free of any unreasonable restraints. The Board of Directors and/or advisory committees meet on a regular and frequent basis with the key function and discuss any contentious issues that have arisen without the necessity that management is present.

When appointing or reappointing a key function, the Board of Directors and/or advisory committees should satisfy themselves that the candidate is independent in accordance with applicable standards.

Internal Audit function

The key role of the Internal audit function carried out by Internal Auditor, is to assist the Board and the Audit Committee in discharging its governance responsibilities by delivering:

- An objective evaluation of the existing risk and internal control framework
- Systematic analysis of business processes and controls
- A source of information on irregularities and unacceptable levels of risk
- Reviews of the compliance framework and specific compliance issues.
- Evaluations of operational and financial performance
- Reports on the evolution and the quality of the Solvency II implementation
- Recommendations for more effective and efficient use of resources
- Feedback on the values and ethics of the association
- Review of the questionnaire on prevention of money laundering and financing of terrorism
- Review of the Internal Procedure Manual and the Memorandum Corporate Governance

Therefore, internal audits take place at the various divisions of the Mutual at regular times but at least twice a year. The Internal Auditor will write down his observations and recommendation in a report for the Audit Committee. This written report including his numbered recommendations,

if necessary with comments from the Audit Committee, is finally presented to the Board of Directors and disclosed to the C.A.A.

The Internal Audit function, being the Internal Auditor, is a key function and has to be fit and proper by performing annually a self-assessment.

More information on the working of the Internal Audit can be found in the Internal Audit Policy.

Compliance function

The compliance function carried out by the Compliance Officer, assesses the conformity of codes of conduct and procedures in relation to the policy of ethics in the Association. These rules arise from NIRA's own integrity policy as well as from its legal status and other regulatory provisions to identify and evaluate compliance risks.

The responsibility for compliance within an organisation is defined at four levels:

- the Board of Directors is responsible for defining the compliance principles to which the Association has to adhere
- the Management Committee being in charge of the daily management of the Association is jointly responsible for implementing a compliance policy and a permanent compliance function
- the Compliance function must identify and assess the compliance risks, supervise the implementation of applicable laws and establish appropriate compliance checks and controls
- at operational level, compliance is the responsibility of all staff members through adherence to applicable laws and the internal policies, standards and procedures.

Appropriate measures have been taken to ensure the objectivity and independency of the Compliance Officer.

The Compliance Officer informs the Board of Directors in writing at least once a year of the situation on compliance within the Mutual in a report that is also disclosed to the C.A.A.

The Compliance function is a key function and has to be fit and proper by performing annually a self-assessment.

More information on the working of Compliance can be found in the compliance policy.

Risk Management function

The Board of Directors and Management Committee decide on the risk strategy and design of the risk structure. The Risk Management function, deploys practices to identify, assess, monitor and

mitigate various risks to NIRA's business. Because risks are not limited to one department, the Risk Management function carries out his duty throughout the Association.

The Risk Management function will on a regular basis report to the Management Committee, Risk Committee and Board of Directors on the effectiveness of his assessments. In his reporting, the Risk Management function will identify those risks which require attention and propose proper risk treatment.

The Risk Management function is a key function and has to be fit and proper by performing annually a self-assessment.

More information on the working of risk management can be found in the risk management policy and internal control policy.

Actuarial function

The Actuarial function in charge of the control on the calculations made by the NIRA and to give a level of comfort to the Board of Directors on actuarial processes.

NIRA is required by law to have a mathematic investigation NIRA to assess the risk in contribution and claim liabilities in respect of insurance policies. The actuarial function verifies annually the computations on the basis of recognised actuarial methods and publishes them in an actuarial report. The actuarial report contains recommendations or comments to improve the reliability of future valuations of insurance policy liabilities and solvency requirements.

According to article 48 of the Directive Solvency II the Actuarial function has the following responsibilities:

- Coordination of the technical provisions calculation
- Control the data quality
- Advice on the underwriting and reinsurance policies
- Express his opinion on the actuarial report.

The Board of Directors executes the efficiency and reliability on the work performed by the Actuarial function.

The Actuarial function is a key function and must be fit and proper by performing annually a self-assessment.

More information on the working of the Actuarial function can be found in the actuarial function policy.

Statutory Auditor

NIRA must have its annual accounts audited by one or more registered auditors amongst the members of the Luxembourg Institute of Registered Auditors. The Statutory Auditor conducts his audit in accordance with International Standards on Auditing as adopted for Luxembourg by the *Commission de Surveillance du Secteur Financier*. Those standards require that they comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the annual accounts are free from material misstatement.

The Statutory Auditor and his remuneration are to be appointed for a period of 1 year by the Annual General Meeting on recommendation of the Board of Directors. The Mutual informs the nomination to the Luxembourg authority. Within the Mutual, the statutory auditor reports in writing to the Managing Director and the Audit Committee.

Deloitte Audit - Represented by Mr. L. Bardon, Statutory Auditor
560, Rue de Neudorf
L-2220 Luxembourg

Investments / "Prudent person" principle: policy and implementation process

Investments of NIRA are based on the following principles:

- Investments shall be made in the sole interest of NIRA and its key stakeholders.
- Investments shall be made with care, diligence and prudence.
- Investments shall be carefully diversified as to minimise the risk of large and unexpected losses.
- NIRA may engage different investment managers with varying investment philosophies and strategies in order to attain its business objectives.
- Appointed investment managers shall adhere to NIRA's investment strategy for which they were engaged and shall make reasonable efforts to preserve capital while understanding that losses do occur at individual securities.
- Appointed investment managers shall make reasonable efforts to manage and control risks and maintain risk taking within the guidelines and are proportionate to the expected returns.
- Cash must be deployed productively at all times by investing in short-term cash-equivalents while maintaining the desired liquidity level.

The monitoring and control of the investment process is done on the basis of the three lines of defense. The 1st line of defense is the Asset Manager of NIRA (or external investment manager). The second line of defense is the FIAC and the third line is the Board of Directors.

Principle: Internal Control System

The permanent internal control system has to lean on an analysis and a measure of the risks, regularly updated, by every person in charge of business units (which are risk owners).

Every stakeholder within NIRA has an internal control responsibility. The Board of Directors is responsible for promoting a high level of integrity and for establishing a culture within the Association that emphasizes and demonstrates to all levels of personnel the importance of internal control. Management is responsible for the implementation of the internal control principles. It is therefore essential that everyone, including all personnel, understands the importance of internal control and engages actively in the process according to their responsibilities and specific duties.

For the identification and description of risks, NIRA has focused on key risks and on management related controls that mitigate those risks. NIRA's key risks definitions are based on existing information such as different control reports and regularly self-assessments. To lead to an efficient identification of those controls, interviews were conducted with every member of the Management. All this information has come together in a working document referred to as NIRA's risk log.

The risk log identifies NIRA's key risks. The management crosschecks the type of risk with existing control measures to see how they are currently mitigated. This exercise is performed at the end of each year and in preparation for the year to come.

Finally, NIRA emphasizes that risk awareness is a priority of every member of staff.

Policies and procedures

Policies and procedures are instruments of organization and control that contribute to the realization of the fixed objectives. They have to be in adequacy with the various identified, easily accessible risks and be the object of a communication and adequate trainings. They must be updated also regularly. The risk owners are responsible for the maintenance of processes and procedures.

Control plans

Internal control processes occur throughout the entire organisation, at all levels and in all functions, since everyone in NIRA bears responsibility in internal control. Focus will be on "at the top" perspectives, but adequate controls must exist and be understood in all departments and by all employees with access to control mechanisms. NIRA uses the four eyes principle to protect itself against mistakes and dishonesty in day-to-day management and outgoing payments and communication.

The Management Committee takes all necessary internal control measures to ensure that all the divisions of the Association have job descriptions with clear responsibilities. The Management Committee is responsible for implementing the risk management strategy and designing the structure, so it is integrated into the organisational structure.

Reporting and recommendations

The reporting is the responsibility of the Risk management function.

Further to a report on a situation of failure or inefficiency or an evolution of the permanent control, various participants can emit a recommendation (the Supervisor, the Statutory Auditor, the Internal Auditor) or introduce an action of correction / prevention. The impulse of actions of correction or prevention and their follow-up are the current responsibilities of the management. The level of formalization in the action plan possibly implemented and its follow-up must be proportioned at the incurred risk, at the difficulty of implementation, at the desire at the risk of the Mutual.

4. Risk Management System, ORSA process and risk management function

Principle: Risk Management System

The appetite for risk represents the underlying foundation of any effective Risk Management System. Understanding risk appetite helps Boards and Management to make better strategic and tactical decisions. It enhances understanding of Board and stakeholder expectations and enables risk-reward decision-making. It reduces the likelihood of unpleasant surprises.

We define the risk appetite as being the nature and quantity of risks that NIRA is ready to accept or to tolerate in the pursuit of its strategic objectives, taking into account the expectations of the stakeholders.

The risk tolerance defines the maximum amount of risk (bearing activities) needed to achieve all the organisational strategic objectives while simultaneously remaining compliant with the stakeholder's expectations.

The risk target is the optimal risk level to achieve the strategic objectives with respect of the tolerance limits.

The success of its business model depends materially on its ability to manage risk. NIRA considers the implementation of a suitable and effective Risk Management system as a strategic imperative

not only to meet increasingly changing regulatory requirements but also to gain a competitive edge by improving its understanding of its own risks and overall solvency needs.

As an integral part of NIRA's business cycle, the Board shall approve the Risk Strategy and issue a Statement of Risk Appetite. "Risk" is defined as the degree of uncertainty with respect to achieving planned goals and targets and equally encompasses the probability of loss or gain. The Risk Strategy, including the Statement of Risk Appetite shall be clearly reflected in the agreed business targets, financial budgets, underwriting guidelines, and operational plans.

The Board delegates to the Management Committee the responsibility of implementing adequate risk management processes and policies to ensure risk management is correctly embedded within all operations and in all departments. The Board and Management Committee are assisted in this task by the Risk Manager and Risk Committee.

NIRA's Risk Management Policy, its Risk Management System and ORSA are to be reviewed by the Board at least annually. The review will be based on input provided by the Risk Manager and Management. More regular reviews may be undertaken when required or when there is a material change in the business or risk profile of NIRA or where a risk issue which raises doubts about the effectiveness of the Risk Management System has been identified.

Specific guidelines for each risk

NIRA's Risk Management system, based on a top-down as well as bottom-up approach, covers all existing as well as evolving risks that have the potential to materially impact the adequacy of its financial resources, the volatility of its results or its ability to meet its commercial, legal and regulatory obligations. These risks include, but are not limited to, the following:

Insurance risks refer to the risk of loss, or adverse change in the value of insurance liabilities, due to inadequate pricing and reserving practices. These risks may be caused by the fluctuations in timing, frequency and severity of insured events and claim settlements in comparison to the expectations at the time of underwriting.

Market risk is the risk of loss or adverse change in the financial position due to fluctuations in the level and in the volatility of market prices of assets, liabilities and financial instruments. This risk may be caused by fluctuations in foreign exchange rates, interest rates or equity, market liquidity, property and securities values.

Credit risk is the risk of loss or adverse change in the financial position due to fluctuations in the credit standing of issuers of securities, reinsurers, counterparties or any other debtors.

Operational risk, including compliance risk, refers to the risk of loss arising from inadequate or failed internal processes, people, systems, or from external events. This risk encompasses all functions rendered during conducting business, including strategy and business planning,

underwriting, reinsurance purchasing, reserving, claims management, accounting, investments, treasury, information technology, legal and regulatory, and financial reporting functions.

Liquidity risk is the risk of a loss or inability to realise investments and other assets in order to settle financial obligations when they fall due.

Strategic risk is the risk of the current or prospective impact on earnings or capital arising from adverse business decisions, improper execution of decisions made, or lack of responsiveness to industry changes. Strategic Risk includes risks relating to accessing / raising capital, capital allocation, competition and maintaining ratings.

Reputational risk is the risk of potential loss through a deterioration of NIRA's reputation or standing due to a negative perception of its image among members, counterparties, shareholders or supervisory authorities.

Emerging risks refer to risks that do not currently exist or are not currently recognised but have the potential to materially impact the adequacy of NIRA's financial and operational resources, the volatility of its results and expected financial income or its ability to meet its commercial, legal and regulatory obligations following changes in the environment.

Risk Reporting System

The Risk Manager will report to the Risk Committee and Board of Directors at least quarterly. The Management Committee is informed at least monthly. The Risk Management function will annually disclose a risk management report as well as for the year to come a risk management plan.

The Management Committee will report to the Board at least yearly on its assessment of material risks and on any significant changes to the overall risk profile of the company including actions being taken to mitigate or control key risk exposures. It reports also on the failures in relation to the risk appetite and precises if that is an asset or a liability breach.

Implementation process

An effective governance system requires written policies embedding the governance processes. Risk management is therefore well described within NIRA. Key reference documents are Procedure manual, Memorandum Corporate Governance and Risk Management policy.

Principle: ORSA process

The ORSA process seeks to draw together considerations of risk, capital and returns within the context of the overall business strategy, both in the present and forward looking, providing a holistic view of the capital, risk and return over the forecast period.

The ORSA process is used to:

- Ensure there is sufficient capital available to meet the current business requirements (Solvency II compliance);
- Determine the supplementary capital required to meet the growth and diversification plans and other strategic decisions;
- Ensure that any risks that exceed the risk appetite are identified, assessed and if required the remedial action plan in place;
- Provide assurance to the Board, financial regulators and other stake holders that risk management and capital planning processes are embedded within the business.

NIRA performs an ORSA at least annually or when the risk and solvency profile change significantly. The risk profile is continuously monitored against the risk appetite and periodically reported by Risk Manager.

The overall purpose for the ORSA assessment is to ensure that we can continuously meet our current and planned future regulatory targets and internally set capital target, in the face of planned changes to the risk profile and business plans, and expected development in the external environment.

As a management tool, it is designed to embed risk awareness within the business culture and decision making. It is an integral to the successful delivery of the overall strategic plan as it provides the management with a good understanding of the risk it is assuming and the capital required to cover those risks. It must be treated as a management process rather than a compliance exercise.

Time Horizon

The time horizon of the ORSA is fixed to 5 years, same horizon as used in the strategic business plan. The strategic business plan is the Base scenario of the forecasted P&L and Balance Sheet. For the solvency projections in ORSA use will be made of best estimates, market value balance sheet and SCR from Pillar I calculations as starting point.

Scenario-stress testing

The Strategic Business Plan (SBP) figures will be used for projection of the technical provisions and cash flows in and out. The calculation of the projected SCR can then be done. The final result is the “Base Case” and gives the expected capital needs/surpluses.

Besides the base scenario, we analyse also the effects of adverse developments on its solvency position. This is done with the help of scenario analysis and stress testing: we define scenario analysis as assessing the impact of a combination of factors. Stress testing is an extreme scenario that crosses the boundaries of the SCR-MCR.

Frequency and triggers of ORSA

We perform an ORSA at least annually and an update when the risk and solvency profile change significantly. The risk profile is continuously monitored against the risk appetite and periodically reported.

Target ratio set by the Board is 125%. We have tested 3 scenarios:

Scenario 1 – Large claim: occurrence of an extraordinary claim in 2017 with an amount of 67 million €, net of reinsurance which is our highest net own retention.

Regarding the payment pattern of this event, we consider that the claim is paid according to the payment pattern observed with the payment triangle of the period 2006-2016; meaning that only 3.42% is paid each of the first two years and the remaining is paid the third year.

Scenario 2 – Large claim: occurrence of a large claim in 2017 with an amount of \$ 95 million, gross of reinsurance which is our highest gross exposure, of which \$ 70 million are retroceded. We consider in that scenario that the reinsurance receivable is collected only at 75%.

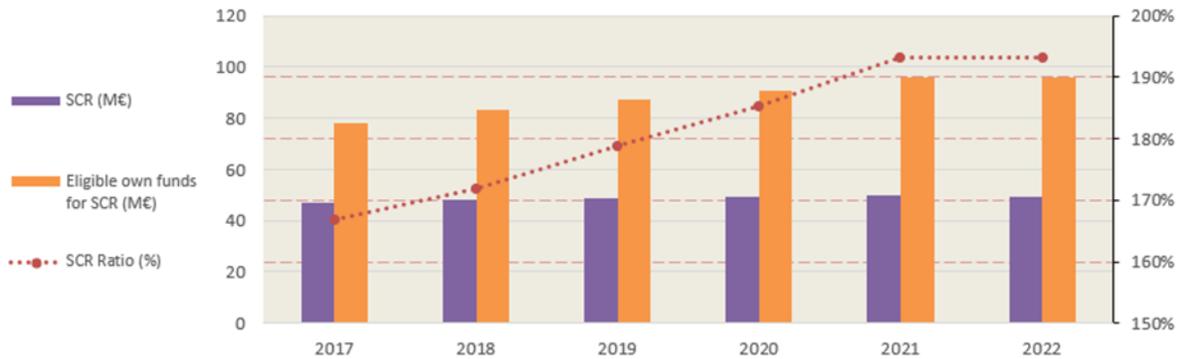
Regarding the payment pattern of this event, we consider that the claim is paid according to the payment pattern observed with the payment triangle of the period 2006-2016; meaning that only 3.42% is paid each of the first two years and the remaining is paid the third year.

Scenario 3 – market value decrease of assets: The purpose of this scenario is to see what would happen if the market value of assets decreases significantly; we assume a decrease by 15% for Bonds and 30% for Equities.

The graph here below compares the Solvency 2 ratio (Eligible Own funds / SCR) between the Base Case (corresponding to the SBP) and the stress scenarios.

Dimensions	Key performance Indicators	2017	2018	2019	2020	2021	2022	Target
Capacity	Growth in Av. Capital (Eligible OF)	4,6%	6,5%	4,8%	4,5%	5,4%	0,0%	0 - 5%
Solvability	Solvency 2 ratio (Tier 1)	167%	172%	179%	185%	193%	193%	125% min.
P&L	Net Combined Ratio	2,9%	37,2%	34,8%	38,6%	39,7%	33,8%	0 - 95%
Liquidity	% cash of total assets	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	0 - 50%

Central scenario - Solvency Capital Requirement Projection						
	2017	2018	2019	2020	2021	2022
SCR (M€)	46,8	48,3	48,7	49,1	49,6	49,6
Eligible own funds for SCR (M€)	78,0	83,1	87,1	91,0	95,8	95,9
SCR Ratio (%)	167%	172%	179%	185%	193%	193%



5. Capital Management and SCR-MCR

Capital requires a clearly defined management approach in order to ensure efficient and effective deployment.

NIRA currently does not have capital items other than unrestricted Tier 1 Own Funds. Major difference between equity in the LUXGAAP financial statements and the excess over liabilities as calculated for Solvency II purposes, is mainly from the revaluation of the equalisation reserve towards total basic own funds.

Nira uses the Standard formula to calculate its SCR and MCR. In annex you may find some tables.

6. Outsourcing

Policy

NIRA updates and discloses yearly an outsourcing policy. The respect of this policy is compulsory every time a subcontracted activity can have a significant influence on the functioning of NIRA.

The activity, the service or the process are assessed by:

- Strategic impact: the concerned activity is inherent to the status of NIRA;
- Significant impact on the control of the risks: the realisation of the tasks linked to the concerned activity implies significant risks and/or affects directly the control of the risks;
- Significant impact on the budget or the financial results: the realisation of the tasks linked to the concerned activity represents a significant cost and/or products a significant financial result.

More information can be found in the Outsourcing Policy of NIRA.

Staffing of supervision

The subcontracting reduces in no way the responsibility of the Management Committee and the Board of NIRA whether regarding the Members, supervisory authorities or other shareholders: NIRA has to keep ultimate responsibility of its activity.

For any subcontracted essential activity, the Management Committee of NIRA will appoint in house a person in charge of the subcontracted function to whom it will delegate the correct application of the present policy. This person will be in charge in particular of defining the contents of the subcontracting, the necessary internal resources, the interfaces between the parties, the controlling of the subcontracting, the establishment of the assessment of the subcontracted function (economic profits vs risks) and the reporting to the Management Committee.

The subcontracted organization of the outsourced function should allow a permanent control of the provider. The subcontracted organization will have in particular the obligation to raise any operational incident having an impact on the subcontracted activities, as well as in emergency situation. The process of subcontracting is resumed in the plan below. Each of the stages of the process is explained in the outsourcing policy.

7. Status of the SFCR and date

For practical reasons, the SFCR is written in a masculine version where we often use words as he or his. In NIRA, where we believe in equal rights, it is not more than normal that those words can be used if appropriate in their feminine form.

A mutual is always in change. To avoid continuous and minor adaptations to the SFCR, the Management Committee yearly evaluates and updates the SFCR where necessary. A minimal improved version is too insignificant to be presented to the Board of Directors. However, major modifications that have a structural impact on the organization should be approved by the Board of Directors. Their consent will be expressed by the signature of the Managing Director.

Latest review date	28-06-2019
Latest assessment by Management Committee	08-07-2019
Brought to the Board of Director	24-09-2019

Approved and duly signed at 08/07/2019 by,

A handwritten signature in blue ink, appearing to read 'D. Vanwelkenhuyzen', written over a horizontal line.

D. Vanwelkenhuyzen
Dirigéant Agréé



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ANNEX

Annex 1: list of critical functions & internal responsible

Name	functions
Gregoire Levavasseur	actuarial function
Ivan Annezer	risk management function
Willy Gemis	internal audit function
Annemie Roefs	compliance function

function	full or partial outsourcing	internal person in charge
Actuarial function	-	Gert Jan Geertsema
Internal Audit function	full	Jose Luis Carbonell
IT	partial	IT Manager
Compliance function	-	Jose Luis Carbonell
Risk Management function	-	Gert Jan Geertsema

Annex 2: list of members Board and key functions

Name	functions	specific remuneration
Gert Jan Geertsema	Chairman	NO
Klaus Greimel	Vice-Chairman & Independent Director	YES
Kathleen Sinclair	Vice-Chairman	NO
Danny Vanwelkenhuyzen	Executive Director & Dirigéant Agrée	NO
Maria Laguna	Executive Director	NO
Jose Luis Carbonell	Independent Director	YES
Vaclav Hronek	Board member	NO
Detlev Prüske	Board member	NO
Gregoire Levavasseur	actuarial function	NO
Ivan Annezer	risk management function	NO
Willy Gemis	internal audit function	outsourcing*
Annemie Roefs	compliance function	NO
*outsourcing: according to a market conform outsourcing contract		

Members of the Boards of Directors or Management Committee	fixed annual remuneration	variabel		total annual remuneration
		annual remuneration	other annual remuneration	
Klaus Greimel	9 600 €	-	-	9 600 €
Jose Luis Carbonell	9 600 €	-	-	9 600 €
Other members of the Board	-	-	-	-
Management Committee	-	-	-	-

Annex 3: Solvency II

NUCLEAR INDUSTRY REINSURANCE ASSOCIATION

BALANCE SHEET AS OF 31 DECEMBER 2018
 (Currency - Euro)

ASSETS	LUX Gaap	Solvency II	Difference
Investments			
III. Other financial investments			
1. Parts in investment funds	81.101.540	81.183.447	+ 81.907
2. Bonds and other fixed interests	0	0	+ 0
6. Term deposits	1.290.520	1.290.520	+ 0
	82.392.060	82.473.967	+ 81.907 (1)
Deposits with ceding undertakings			
	3.140.190	3.140.190	+ 0
Reinsurance share of the technical provision			
Provision for unearned premiums	811.376	794.492	- 16.884
Claims provisions - Total recoverable from reinsurance	0	0	+ 0
	811.376	794.492	- 16.884 (2)
Debtors			
Debtors arising out of reinsurance operations	2.610.614	2.610.614	+ 0
Other debtors	83.212	83.212	+ 0
IV. Subscribed capital, not paid	0	0	+ 0
	2.693.826	2.693.826	+ 0 (3)
Other assets			
I. Tangible assets	152.795	152.795	+ 0
II. Liquidities	5.004.961	5.005.718	+ 758
	5.157.756	5.158.514	+ 758 (4)
Prepayments and accrued interest			
Accrued interest and rent	855	98	- 758
Deferred acquisition costs	51.240	0	- 51.240
Other prepayments and accrued income	51.914	51.914	+ 0
	104.009	52.011	- 51.997 (5)
TOTAL ASSETS	94.299.217	94.313.000	+ 13.783

(1) Whereas investments are reported at their book value under Luxembourg GAAP,

the Solvency II regime takes into account multiple factors :

- the initial value of the investments is the market value at the reference date (= date of the balance sheet)
- possible shocks on the assets related to interest rate risk, equity risk, property risk, spread risk, currency risk and concentration risk
- accrued interest

(2) Provisions for reinsurance under the Solvency II regime are discounted to their net present value (NPV) at reference date and reported as "Reinsurance recoverables"

(3) No adjustments under Solvency II

(4) Tangible assets (excl. real estate) are valued at their book value both under Luxembourg GAAP as Solvency II.

Under Solvency II, the liquidities are valued at their nominal value including the accrued interests.

(5) Under the Solvency II regime, the amounts of accrued interests on assets are included in the value of the assets themselves.

Solvency II does not recognise 'Deferred acquisition costs' hence not appearing on the Solvency II balance sheet.

BALANCE SHEET AS OF 31 DECEMBER 2018
 (Currency - Euro)

LIABILITIES	LUX Gaap	Solvency II	Difference
Capital and Reserves			
Subscribed Capital	3.600.000	3.600.000	+ 0
Equivalent Funds	31.549.379	31.549.379	+ 0
Profit of the financial year	0	0	+ 0
Reconciliation reserve (Solvency II regime)			
Asset adjustments (1) + (2) + (3) + (4) + (5)	0	13.783	+ 13.783
Liabilities adjustments (8.1) + (8.2) + (9) + (10)	0	43.772.843	+ 43.772.843
Technical provisions adjustment (7)	0	-10.033.653	- 10.033.653
	35.149.379	68.902.352	+ 33.752.972 (6)
Technical provisions (Solvency II)			
Best Estimate		7.642.311	+ 7.642.311
Risk Margin		2.391.342	+ 2.391.342
		10.033.653	+ 10.033.653 (7)
Technical reserves (LUX Gaap)			
Provision for unearned premiums	2.947.543	0	- 2.947.543
Claims outstanding	10.764.707	0	- 10.764.707
Equalisation provision	44.566.093	0	- 44.566.093
	58.278.343	0	- 58.278.343 (8)
Other provisions			
Deferred tax liability	0	14.505.500	+ 14.505.500
	0	14.505.500	+ 14.505.500 (9)
Creditors			
Creditors arising out of reinsurance operations	648.800	648.800	+ 0
Other creditors, including tax and social security	203.525	203.525	+ 0
	852.325	852.325	+ 0 (10)
H. Transitory accounts			
	19.169	19.169	+ 0
	19.169	19.169	+ 0 (11)
TOTAL LIABILITIES	94.299.217	94.313.000	+ 13.783

(6) Under Solvency II, the own funds are calculated as the excess of assets over other liabilities and composed out of the capital and the reconciliation reserve

Non-eligible capital is cleared from the balance sheet (not mentioned as capital nor as reconciliation reserve)

The reconciliation reserve consists of the asset adjustments, liability adjustments and technical provision adjustments

(7) The technical provision is calculated as the sum of the Best Estimates (= discounted Premium and Claim reserves) and the Risk Margin (= additional capital buffer to be calculated using a cost of capital of 6% p.a. and discounted at the risk-free rate.)

The IBNR claims reserve is not considered as a claims reserve under Solvency II and therefore not included in the Best Estimates for claims.

(8) Solvency II does not recognize technical reserves. These reserves are transferred to

- technical provisions (subject to calculation of shocks and to a discount factor)

- own funds (subject to calculation of shocks and to a discount factor)

- IBNR claims reserve is considered as own funds under Solvency II

(9) Since April 2019, the CAA has requested NIRA to calculate a deferred tax liability in Solvency II (applicable to 31/12/2018 figures).

This deferred tax comes from the future potential profit arising from the differences between the LUXGaap balance sheet and the Solvency II balance sheet.

(10) There is no distinction between the origin of the payables under Solvency II.

(11) Transitory accounts are valued at their nominal value under Solvency II

MCR & SCR RATIO - 31 December 2018		
Total Basic own funds		68.902.351,84 (12)
- Own funds Tier I	68.902.351,84	(12a)
- Own funds Tier II	0,00	(12b)
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds		0,00 (12c)
Deductions for participations in financial and credit institutions		0,00
	0	0,00
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	0,00	0,00
Eligible ancillary own funds		0,00 (13)
Total eligible own funds to meet the SCR (12a) + (12b) + (13)		68.902.351,84 (14)
Total eligible own funds to meet the MCR (12a) + (12b) with (12b) ≤ 20% of (17)		68.902.351,84 (15)
Solvency Capital Requirement (SCR)		27.540.938,90 (16)
Minimum Capital Requirement (MCR)		6.885.234,72 (17)
Linear MCR	1.521.971,66	
MCR floor = 25% of (16)	6.885.234,72	
Absolute floor (if both Linear MCR and MCR floor below)	3.700.000,00	
SCR ratio (14)/(16)		250,18% (18)
MCR ratio (15)/(17)		1000,73% (19)

(12) See Solvency II balance sheet.

(12c) Uncalled capital or called capital that is not payable within 3 months are considered as non-eligible own funds, except for the capital that was called up prior to 2016.

(13) Supplementary members calls can be taken into account as ancillary own funds.

The amount of ancillary own funds is however limited to 50% of the SCR amount. = max 50% of (16) and subject to approval by the regulator

(14) Total eligible own funds to meet the SCR is the sum total basic own funds and the eligible ancillary own funds

(15) To determine the eligible own funds to meet the MCR, only the Basic own funds are taken into account = (12).

However the Tier II capital taken into account is limited to 20% of the MCR. (Eligible Tier II capital = max 20% of (17))

(16) See separate calculation sheet for the composition of the SCR

The SCR is the sum of market risks, counterparty risk and catastrophe risk, after a correlation factor is applied.

(17) The linear MCR is calculated according to the Solvency II guidelines (standard formula non-life business).

The MCR is equal to the linear MCR, however a minimum of 25% of the SCR is applied

(18) The SCR ratio is calculated as the total eligible own funds to meet the SCR (14) divided by the SCR (16)

(19) The MCR ratio is calculated as the total eligible own funds to meet the MCR (15) divided by the MCR (17)

INCOME STATEMENT FOR THE PERIOD ENDED 31 DECEMBER 2018
 (Currency - Euro)

	31 December 2018
Earned premiums net of reinsurance	
a) Gross premiums	8.638.013
- Premiums written	8.638.013
- Rebates to members	0
b) Reinsurance premiums	- 1.379.116
c) Variation of the reserve for unearned premiums and unexpired risks, gross of reinsurance (increase -, decrease +)	- 457.371
d) Variation of the reserve for unearned premiums and unexpired risks, reinsurers part (increase +, decrease -)	209.355
	7.010.882
Investment income	
b) Income from other investments	223.610
c) Write-back of adjustments on investments	0
d) Realized capital gains	595.295
	818.905
Other technical income net of reinsurance	9.291
Costs of claims, net of reinsurance (-)	
a) Net amount paid	- 551.409
aa) gross amount	- 551.409
bb) part of reinsurers	0
b) Variation of the claims services reserve, net of reinsurance	804.406
aa) Variation of the reserve for claims gross of reinsurance	804.406
bb) Variation of the reserve for claims part of reinsurance	0
	252.997
Net operating expenses (-)	
a) Acquisition expenses	- 385.446
b) Change in deferred acquisition costs	- 26.316
c) Administrative expenses	- 918.411
d) Reinsurance commissions and profit participation	87.335
	- 1.242.839
Expenses relating to investments (-)	
a) Expenses for managing investments	- 2.409
b) Adjustments to investment values	0
c) Realized less values	- 311.506
	- 313.915
SURPLUS/(DEFICIT) OF THE PERIOD BEFORE VARIATION RESERVE FOR EGALIZATION AND	6.535.320
Variation in the reserve for equalization and catastrophes, net of reinsurance	- 6.489.925
SURPLUS/(DEFICIT) OF THE PERIOD AVAILABLE FOR DISTRIBUTION	45.395
Taxes	- 45.395
RESULT OF THE PERIOD	0

	31 DEC 2015	31 DEC 2016	Change to 31 DEC 2015	31 DEC 2017	Change to 31 DEC 2016	31 DEC 2018	Change to 31 DEC 2017
SCR	35.159.722	39.497.943	+12%	46.802.298	+18%	27.540.939	-41%
Eligible capital	72.827.188	74.500.594	+2%	78.049.525	+5%	68.902.352	-12%
surplus	37.667.466	35.002.652	-7%	31.247.227	-11%	41.361.413	+32%
SCR coverage ratio	207,13%	188,62%	-19%	166,76%	-22%	250,18%	+83%

