

MFSA

MALTA FINANCIAL SERVICES AUTHORITY

**Guidance Notes on Risk Management and
Internal Capital Adequacy Assessment for
Regulated Markets and
Central Securities Depositories**

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Introduction

Risk

Risk can be defined as the combination of the probability of an event and its consequences. In all types of undertaking, there is the potential for events and consequences that constitute opportunities for benefit (upside) or threats to success (downside).

Risk Management

Risk management is about sound management of an organisation and the establishment of systems to avoid adverse effects and to take advantage of opportunities.

Risk management is a central part of any organisation's strategic management. It is the process whereby organisations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities.

The focus of good risk management is the identification and treatment of these risks. Its objective is to add sustainable value to all the activities of the organisation. It marshals the understanding of the potential upside and downside of all those factors which can affect the organisation. It increases the probability of success and reduces both the probability of failure and the uncertainty of achieving the organisation's overall objectives.

Risk management should be a continuous and developing process which runs throughout the organisation's strategy and implementation of the strategy. It must be integrated into the culture of the organisation with an effective policy and a programme led by the most senior management. It must translate the strategy into tactical and operational objectives, assigning responsibility throughout the organisation with each manager and employee responsible for the management of risk as part of their job description. It supports accountability, performance measurement and reward, thus promoting operational efficiency at all levels.

Purpose & Contents

Certain Regulated Markets and Central Securities Depositories [henceforth referred to as 'Authorised Persons'] are, in terms of the Rules which apply to these types of institutions, required to identify the risks relating to their activities, processes and systems, and to manage these risks effectively.

The purpose of these Guidance Notes is to afford Authorised Persons with best practice guidance on the manner in which they may comply with the applicable risk management requirements.

These Guidance Notes are divided into two parts: **Part A** explains the Risk Management and Internal Capital Adequacy Assessment Process and outlines the manner in which an Authorised Person may compile a RMICAAP Report. **Part B** explains the technical criteria on the review and evaluation by the MFSA of an Authorised Person's RMICAAP.

Source

In preparing these Guidance Notes reference was made *inter alia* to: **[i]** Guidelines on the Application of the Supervisory Review Process issued by the Committee of Banking Supervisors on the 25th January, 2006; **[ii]** Paper on the Internal Capital Adequacy Assessment Process (ICAAP) for small institutions issued by the Committee of European Banking Supervisors on the 27th March, 2006; **[iii]** Guidance Note on Basel II: Pillar 2 – The ICAAP & the SREP, issued by the Gibraltar Financial Services Commission on the 18th December, 2007; and **[iv]** the Risk Management Standard issued by the Institute of Risk Management, the Association of Insurance and Risk Managers and the National Forum for Risk Management in the Public Sector during 2002.

Part A

The Risk Management and Internal Capital Adequacy Assessment Process

Risk management covers all processes involved in identifying, assessing and judging risks, assigning ownership, taking actions to mitigate or anticipate them and monitoring and reviewing progress.

The internal capital adequacy assessment process has the purpose of: **[a]** ensuring that the Authorised Person adequately identifies, measures, aggregates and monitors its risks; **[b]** holds adequate internal capital in relation to its risk profile; and **[c]** uses sound risk management systems.

The risk management and internal capital adequacy assessment process (RMICAAP) can be subdivided into six stages: **[i]** risk identification; **[ii]** description of risk; **[iii]** risk estimation; **[iv]** risk tolerance and evaluation; **[v]** risk treatment; and **[vi]** risk recording/ reporting.

[I] Risk Identification

Risk identification is the process whereby the Authorised Person identifies its exposure to uncertainty. This requires an intimate knowledge of the organisation, the market in which it operates, the legal, social, political and cultural environment in which it exists, as well as the development of a sound understanding of its strategic and operational objectives, including factors critical to its success and the threats and opportunities related to the achievement of these objectives.

The purpose of this initial stage in the risk management process is to record (in a structured form) as many risks as possible which might hinder the Authorised Person in attaining its goals. Risk identification should be approached in a methodical way to ensure that all significant activities within the organisation have been identified and all the risks flowing from these activities defined.

This is especially important given that it sets the stage for the remainder of the risk management process.

The following is a list of risks to which an Authorised Person may be exposed:

[a] Pillar I Financial Return - Non-Trading Book Business Risks

[a 1] Credit/Counterparty risk: This being the probability of a loss occurring due to: **[i]** the failure of a debtor of an Authorised Person to meet its contractual

debt obligations; or [ii] the loss in value of any other asset which forms part of the Authorised Person's balance sheet.

In relation to Credit/Counterparty risk, it is recommended that the Authorised Person assesses whether its credit/counterparty risk is fully captured by the Pillar I requirements as reflected in the financial return which the Authorised Person is required to submit in terms of the applicable MFSA rules i.e. For Regulated Markets and Central Securities Depositories - the Financial Markets Rules stipulating financial recourses and financial reporting requirements applicable to Regulated Markets and Central Securities Depositories.

[b] Pillar I Financial Return - Trading Book Business Risks

[b 1] Position Risk: The risk of losses, arising from movements in market prices, in on and off balance sheet investments in financial instruments which qualify as trading book business.

[b 2] Settlement Risk: Settlement risk is the risk that the Authorised Person's cash against documents transactions in financial instruments which qualify as trading book business are unsettled after their due delivery dates.

[b 3] The counterparty risk component: Counterparty risk is the amount of capital which the Authorised Person must hold against exposures in financial derivative instruments and credit derivatives.

[b 4] Free deliveries: Free Deliveries caters for the risk that the Authorised Person has either: (a) paid for free deliveries transactions in financial instruments which qualify as trading book business before receiving them; or (b) has delivered financial instruments which qualify as trading book business, sold in a free deliveries transaction, before receiving payment for them.

In relation to Trading Book Business risks, it is recommended that the Authorised Person assesses whether the above-mentioned risks are fully captured by the Pillar I requirements as reflected in the financial return which the Authorised Person is required to submit in terms of the applicable MFSA rules.

[c] Other Risks covered in the Authorised Person's Pillar I Financial Return

[c 1] Commodities Risk: The risk of holding or taking positions in commodities such as physical products which are and can be traded in the secondary market including commodity derivatives.

[c 2] Large Exposures: Is defined as any single (direct and/or indirect) exposure or group of exposures to a limited number of counterparties, a large transaction, or to a single product type which have the potential to produce material losses which

could threaten an Authorised Person's solvency or ability to maintain its core business.

[c 3] Foreign Exchange Risk: The risk that an asset or liability denominated in a currency other than the reporting currency may be adversely affected by a change in the value of the foreign currency.

[c 4] Operational Risk: Is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk – [applicable to regulated markets and central securities depositories].

In relation to the other risks covered in the Authorised Person's Pillar I Financial Return, it is recommended that the Authorised Person assesses whether the above-mentioned risks are fully captured by the Pillar I requirements as reflected in the financial return which the Authorised Person is required to submit in terms of the applicable MFSA rules.

[d] Other Possible Risks

[d 1] Liquidity risk: An assessment of the extent to which the Authorised Person might face a mismatch between assets and liabilities which could occur as a result of the Authorised Person's assets being pledged, the inability to sell assets quickly or costs and timing constraints of reducing asset positions at difference levels of market liquidation.

[d 2] Compliance Risk: The risk of legal or regulatory sanctions, financial loss, or reputational impact due to a failure to comply with laws, regulations, standard or codes of conduct.

[d 3] Technology Risk: The Risk of loss associated with failed, compromised or inadequate information technology on which the business depends and which can further expose an organisation to additional risk – legal, regulatory, reputation, revenue, and so forth.

[d 4] Strategic Risk: The risk of loss arising from adverse business decisions that poorly aligns to strategic goals, failed execution of policies and processes designed to meet those goals, and inability to respond to macro-economic and industry dynamics.

[III] Description of Risk

The objective of risk description is to display the risks in a structured format. The use of a well designed structure is necessary to ensure a comprehensive risk identification and description process. This will in turn assist the Authorised Person in assessing the risk.

At this stage, it is recommended that the Authorised Person prepares a table which indicates the risk to which the Authorised Person is exposed and the nature of such risk.

[III] Risk Estimation

Risk estimation is a combination of **IMPACT** [being the potential harm that could be caused] and **PROBABILITY** [the likelihood of the particular event occurring]. It is recommended that Authorised Persons assess their risks in terms of possible impact and probability.

Depending on the type of risk, the **impact assessment** may take the form of a quantitative and/or qualitative assessment. A **quantitative assessment** is carried out by calculating the possible financial impact on the Authorised Person of the occurrence of a specific risk. A **qualitative assessment** is the assessment of a risk in terms of a possible impact: **[a] which cannot be quantified** e.g. impact of possible reputational risk due to the breach of market transparency requirements; **or [b] the quantification of which cannot be calculated in its entirety** e.g. impact of the imposition by the MFSA of an administrative penalty and the publication of such penalty on the MFSA's web-page.

Probability is defined as the likelihood of the occurrence of a risk. This is usually based on the history of occurrences of the same risk or similar risks. It is recommended that Authorised Persons classify the probability of a risk as either: **High** – There is more than 75% chance of occurrence; **or Medium** - There is from 25% to 75% chance of occurrence; **or Low** - There is less than 25% chance of occurrence.

Where the impact of a risk is quantifiable in its entirety, it is recommended that the Authorised Person quantifies its **Gross Risk**, this being the multiplication of the impact assessment by the percentage probability of occurrence.

[IV] Risk Tolerance and Evaluation

Risk tolerance is equivalent to the amount of risk which the Authorised Person is willing to take in order to achieve its strategic and business objectives. The higher the Authorised Person's risk tolerance, the more risk such Authorised Person is willing to take.

Risk evaluation is the process used to determine risk management priorities by comparing the level of risk against the Authorised Person's level of tolerance, this with the purpose of determining which risks are acceptable.

Further to quantifying its risks, it is recommended that the Authorised Person

establishes its level of risk tolerance and evaluates its risks by comparing the estimated risks against the risk tolerance criteria which it has established. Through this risk evaluation process, the Authorised Person makes decisions regarding the significance of risks and whether each specific risk ought to be accepted or treated.

[V] Risk Treatment

Risk treatment is the process of selecting and implementing measures to mitigate the risk to which the Authorised Person is exposed with the aim of bringing such risk within the parameters of the Authorised Person's risk tolerance levels. Risk treatment can take the form of either: **[i]** risk control; or **[ii]** risk transfer; or **[iii]** risk financing. An Authorised Person may choose to take a combination of measures in order to mitigate its risks.

[A] Risk Control are measures which aim at either reducing the likelihood or consequences or both of a risk occurring – e.g. stress testing the business of the Authorised Person by contemplating a scenario where the business of the Authorised Person is reduced by 30% and in turn: **[i]** analysing the impact of such a reduction in business on the Authorised Person's financial resources – i.e. in such a scenario will the Authorised Person continue satisfying the financial resources requirement; and **[ii]** considering the action which the Authorised Person's person could take in order to mitigate a possible deficit of financial resources – e.g. possibly entering into a subordinated loan agreement.

[B] Transfer of Risk this is a process whereby the Authorised Person transfers risk in whole or in part to another organisation – e.g. taking a professional indemnity insurance to *inter alia* cover the potential risk of liability resulting from any breach of a provision of the relevant requirements which apply to the Authorised Person and any administrative penalty resulting from such breach.

[C] Risk Financing refers to the mechanisms for funding the financial consequences of risk - e.g. increasing the Own Funds to provide for liquidity risk, which risk is not catered for in the Financial Return which Authorised Persons are required to submit to the Authority on a periodic basis.

In order for an Authorised Person to assess the adequacy of its capital, it is recommended that the Authorised Person applies Risk Financing to treat those risks the impact of which can be calculated in its entirety. In this regard, it is recommended for Authorised Persons to assess:

[a] whether the risks captured by the Pillar I capital requirement calculation, adequately reflect the actual size of the risks faced by the Authorised Person. In this regard, it is recommended that the Authorised Person to estimate the additional capital needed (if any) to protect its business operations from such

risks; and

- [b] the remaining risks which are not captured under by the Pillar I regime – classified in section [I d] above as ‘*Other Possible Risks*’ and where relevant, to estimate any additional capital requirements to mitigate such risks.

Further to the above assessment it is recommended that the Authorised Person carries out a **RMICAAP Risk Financing Calculation** by calculating the total risk capital component required to mitigate the Total Gross Risk (i.e. the summation of all the Gross Risks to which the Authorised Person is exposed). In this regard, in making this calculation it is recommended that the Authorised Person uses the table titled *RMICAAP – Risk Financing Calculation Report* which is outlined in the Annex to these Guidance Notes.

[VI] Risk Recording / Reporting

An Authorised Person is required to assess on a yearly basis whether its RMICAAP is comprehensive and proportionate to the nature, scale and complexity its activities, and to take any necessary measures to ensure this is the case.

Furthermore, on the 31st January of each calendar year, an Authorised Person is required to provide the Authority with a confirmation that it has a RMICAAP in place and that this is comprehensive and proportionate to the nature scale and complexity of the activities of the Authorised Person.

Lastly, an Authorised Person may be required by the Authority to submit a RMICAAP Report.

Given the above-quoted requirements, it is recommended for the Authorised Person to keep a record of: [i] all the risks which it has identified, [ii] the estimation of such risks, [iii] its risk tolerance level and evaluation; and [iv] the manner in which these risks are being addressed. In the case of Risk Financing, a record of the RMICAAP Risk Financing Calculation should also be retained. These records should be updated on a yearly basis.

Should the Authorised Person be requested by the Authority to submit a RMICAAP Report, the Authorised Person would be expected to submit a report in the suggested format set out in the Annex to these Guidance Notes i.e. a report on: [a] the Authorised Person’s risk identification and monitoring process – i.e. a general overview of the arrangements and processes implemented by the Authorised Person with the aim of identifying and monitoring its risks; [b] the individual risks to which the Authorised Person is exposed; and [c] a RMICAAP Risk Financing Calculation Report. It is therefore recommended for an Authorised Person to use the Specimen RMICAAP Report in order to keep a record of: [a] its

risk identification and monitoring process; **[b]** all the risks which it has identified; and **[c]** the RMICAAP Risk Financial Calculation.

Part B

Technical criteria on the review and evaluation by the MFSA of an Authorised Person's RMICAAP

The task of the MFSA is to review and evaluate an Authorised Person's RMICAAP. The purpose of this process is to ensure that an Authorised Person has sufficient capital to support all material risks to which the Authorised Person's business is exposed. The MFSA's review and evaluation of an Authorised Person's RMICAAP will effectively be to:

- [i]** review and evaluate:
 - ◆ the Authorised Person's risk profile;
 - ◆ the adequacy and reliability of the Authorised Person's RMICAAP; and
 - ◆ the adequacy of the Authorised Person's own funds and internal capital in relation to the assessment of its overall risk profile;
- [ii]** monitor ongoing compliance with the Financial Market Rules stipulating Financial Resources and Financial Reporting Requirements applicable to Regulated Markets and Central Securities Depositories; and
- [iii]** identify any weaknesses or inadequacies, and the necessary prudential measures taken to address such weaknesses or inadequacies.

The following is a list of the technical criteria which the MFSA may apply when reviewing and evaluating an Authorised Person's RMICAAP:

- [i]** the robustness, suitability and manner of application of the policies and procedures implemented by the Authorised Person for the management of risks;
- [ii]** the exposure to and management of non-trading book business risks, trading business risks, commodities risk, large exposures, foreign exchange risk, and (in the case of regulated markets and central securities depositories) operational risk by the Authorised Person;
- [iii]** the exposure to and management of other possible risks to which the Authorised Person may be exposed;
- [iv]** the impact of diversification effects and how such effects are factored into the risk measurement system; and

- [v] the results of stress tests carried out by institutions using an internal model to calculate market risk capital.

Annex**SPECIMEN RMICAAP – Report**

Name of Authorised Person	Regulated Market XX
Date of Compilation	31 January 2009
Contents	Section I – Risk Identification and Monitoring Process Section II - RMICAAP Report on the individual risks Section III – RMICAAP Risk Financing Calculation Report

Section II - RMICAAP Report on the individual risks

Name of Risk	E.G. Compliance Risk – Late submission of documents
Nature of the Risk	The risk of legal or regulatory sanctions, financial loss, or reputational impact due to a failure to comply with the financial reporting requirements set-out in the applicable MFSA Rules: i.e. late submission of financial returns.
Risk Estimation	<p>Quantitative Impact: Regulated Market XX could be subject to [i] an initial fine amounting to between € 58.23 and € 114.69; and [ii] possibly a daily fine amounting to between € 11.65 and € 69.88.</p> <p>Qualitative Impact: MFSA name and shame policy (impact cannot be quantified).</p> <p>Probability: The accounting department of Regulated Market XX is currently understaffed and therefore the probability of late submission of a financial return is High.</p>
Risk Tolerance	Regulated Market XX considers its reputation as fundamental for its business and therefore classifies its reputational risk tolerance as low.
Risk Treatment	<p>E.G. Risk control</p> <p>Short Term: The General Manager of Regulated Market XX has agreed with the finance official to work over-time in order to be in a position to submit the financial return on the due date.</p> <p>Long Term: The Board of Directors of Regulated Market XX have decided that within the next year the staff complement of the Finance Office should be increased.</p>

Section III - RMICAAP – Risk Financing Calculation Report

RMICAAP – Risk Financing Calculation Report E.g. For a Regulated Market XX	<i>As reported in the Annual Financial Return</i>	<i>Gross Risks as calculated by the Authorised Person further to the risk estimation process</i>
	<i>Euro</i>	<i>Euro</i>
<i>Pillar I Risks</i>		
Non-Trading Book Business Risks	50,000	50,000
Trading Book Business Risks	230	230
Commodities Risk	-	
Large Exposures	10,000	15,000
Foreign Exchange Risk	2,000	2,000
Operational Risk (Applicable to Authorised Person)	-	
<i>Total Risk</i>	62,230	67,230
<i>Other Possible Risks</i>		
Liquidity Risk		2,000
Compliance Risk		-
Technology Risk		-
Strategic Risk		-
Total RMICAAP Capital Requirement		69,230
Current total Own Funds (minimum Euro 730,000)		731,000
Surplus		661,770