RISK MANAGEMENT

OVERVIEW

The NTMA considers that risk management is a fundamental element of corporate governance and is essential to achieving its strategic and operational goals. The NTMA is subject to the Code of Practice for the Governance of State Bodies (2016) ("the Code") which provides guidance for the application of good practice in corporate governance for both commercial and non-commercial State bodies. The NTMA maintains a formal risk management framework, underpinned by a strong risk culture and overseen by the Agency and risk committees.

POLICY, APPETITE AND FRAMEWORK

The Agency sets the Risk Management Policy and Framework and the Risk Appetite Framework. The Risk Management Policy and Framework defines the standards for risk management across the organisation. It includes the objectives, structures, governance, frameworks, policies, responsibilities and processes that support the effective and integrated management of risk, consistent with the Agency's risk appetite.

The NTMA has defined its risk appetite for its key risk categories within the Risk Appetite Framework. Risk exposures are monitored through the use of key risk indicators and limits as appropriate. The Risk Management Policy and Framework and Risk Appetite Framework are reviewed at least annually to ensure that they remain relevant and up to date.

GOVERNANCE

The Audit and Risk Committee ("the ARC") assists the Agency in the oversight of the risk management framework including monitoring adherence to risk governance and risk appetite. An executive-level Enterprise Risk Management Committee ("ERMC") oversees the implementation of the framework and provides assurance that senior management maintains appropriate systems to ensure enterprise risks are effectively identified, measured, monitored, controlled and reported.

The NTMA's approach to risk management is based on the "three-lines-of-defence" model, set out below, and is designed to support the delivery of its mandates by proactively managing the risks that arise in the course of the NTMA pursuing its objectives.

THREE LINES OF DEFENCE MODEL

FIRST LINE

Business Areas

- Ownership and primary responsibility for identifying, measuring, monitoring, controlling and reporting risks on a day to day basis
- Ensure business activities are within the Agency's risk appetite and compliant with risk management policies

SECOND LINE

Risk Management and Compliance

- Provide independent oversight, review and challenge to the first line of defence
- Independently facilitate and monitor the implementation of effective risk management practices
- Responsible for risk policy development, limits and controls
- Provide training, tools and advice to support policy compliance

Internal Audit

Provides independent, reasonable, risk based assurance on the robustness of the risk management system, governance and the design and operating effectiveness of the internal control environment

THIRD LINE

RISK MANAGEMENT (CONTINUED)

RISK ASSESSMENT

Risk assessment processes are designed to ensure that material risks are identified, that the NTMA manages its risk within its agreed risk appetite, and that the management of risk is monitored within clearly defined and delineated roles and responsibilities.

Individual business units and corporate functions maintain risk registers in which their key risks and controls are recorded and responsibility for the operation of controls is assigned. These registers are reviewed twice yearly by the respective businesses units and corporate functions and the controls therein are attested by the control owners. The review:

- Identifies or re-confirms and classifies the risks to the business;
- Assesses the inherent and residual risk impact and likelihood;
- Identifies existing controls and assesses their effectiveness;
- Identifies proposed treatments and controls; allocates owners for any agreed action plans; and
- Reports on the implementing of measures and controls to address the residual risks;

Business units present principal risks from their risk registers to the ERMC and/or the ARC at least annually.

PRINCIPAL RISKS

The Agency performs a formal, top down assessment of its Principal Risks twice annually, the purpose of which is to identify and mitigate the key risks to the execution of NTMA mandates from an organisation-wide perspective and, in particular, to address any emerging risks as early as possible.

Risk	Risk Description and Possible Impact	Risk Mitigation Measures
Economic, Geopolitical, Regulatory and Market Risk	Extraneous risks such as extreme economic conditions, unforeseen or unpredictable geopolitical, environmental, social or regulatory events and market volatility could adversely impact the NTMA. Possible consequences include a deterioration of the fiscal position leading to increased funding requirements, difficulties in accessing funding or investment opportunities, deterioration of debt sustainability, increased debt service costs, increased cost and/or delay of infrastructure delivery, reduced economic impact or investment returns.	A diversified funding strategy and funding plan approved by the Agency. Key Performance Indicators (KPIs) are in place and reviewed by the Agency semi-annually; Active liquidity, market and credit risk management, governed by policies that are reviewed and approved annually; Ongoing monitoring and reporting of market and macro-economic trends, implications, and key market risk indicators including horizon scanning; Pre-emptive, preventative or corrective actions taken as required; Where specific risks are identified (e.g. Brexit, COVID-19) tailored action plans are put in place and monitored; and Diversified ISIF Global and Irish portfolios.
Climate Risk	As a public body, the NTMA must play its role in supporting Ireland's transition to a low carbon, climate resilient, and environmentally sustainable economy. Failure by the NTMA to act appropriately in performing its functions could result in financial losses and reputational damage. Possible consequences include disruption to the funding model, financial losses or impairments, missed investment opportunities, litigation, or failure to comply with environmental, social and governance standards.	Existing policy and practices provide the NTMA with an ability to respond to sudden increased funding needs, through use of cash balances and an ability to increase short term issuance; Issuance of Sovereign Green Bonds, where proceeds are allocated to eligible Green Projects (as outlined in the National Development Plan 2018 – 2027), are expected to contribute to carbon emission reductions; Active divestment and ongoing exclusion of fossil fuel assets from Irish and Global portfolios; ISIF Climate Strategy in place, which seeks opportunities to allocate to low carbon strategies in the Irish Portfolio and assess and engage on investee transition risks (including emissions) across both the Irish and Global portfolios; NewERA actively working with the relevant Departments in relation to actions assigned to NewERA and relevant commercial State Bodies in the Government's Climate Action Plan; and NTMA corporate initiatives including Green Team and Sustainability Group.

Risk	Risk Description and Possible Impact	Risk Mitigation Measures
Investment Risk	The risk that actual investment performances deviate from the expected outcomes of relevant investment strategies. Possible consequences include: (i) Financial losses or sub-optimal returns; and/or (ii) Unsatisfactory Economic Impact; and/or (iii) Reputational damage.	All investments are made and managed within the approved risk appetite, governed by the relevant investment, liquidity, market and credit risk policies. This includes exchequer/ISIF investments, the Ireland-Apple Escrow Fund and all entities to whom treasury services are provided; All relevant risk policies are subject to annual review and approval through the appropriate governance committee; Agency approved ISIF Ireland Investment Strategy 2.0 in place; Agency approved ISIF global portfolio strategy in place; All new ISIF Irish Portfolio investment proposals are subject to First and Second Line reviews prior to Investment Committee/Agency submission; and Ongoing First and Second Line monitoring and reporting on the ISIF Irish and Global portfolios (including KRIs and RAG status reporting) to relevant Agency Committees.
Liquidity Risk	The possibility that over a specific time horizon, the NTMA will have insufficient cash to meet its obligations as they fall due. Failure to access funding or to strategically manage and plan liquidity requirements could result in the inability to fund the State and the inability to fund investments.	Liquidity Risk Policy, aligned to the approved risk appetite is in place and reviewed annually by the Audit and Risk Committee; A diversified funding strategy and funding plan is approved by the Agency; Active management of the debt maturity profile; Monitoring (including horizon scanning) and reporting of liquidity risk exposures is performed with appropriate escalation to Risk Committees; Stress Testing (generic and multi-factor) is performed; and Agency approved ISIF global portfolio strategy is in place and regularly monitored to ensure adequate liquidity.
Information Technology (IT), Cyber and Information Security	The NTMA is reliant on a number of key IT systems to support ongoing operations. A loss or failure of any of these systems caused by a malicious cyber-attack, software or hardware issues or poor operational performance could lead to business disruption, potential financial loss and/or reputational damage.	ICT Steering Committee in place to oversee and monitor IT architecture. ICT Security Committee in place to provide guidance and assurance in relation to ICT security matters; Security requirements are incorporated and assessed as part of system procurement and selection; Cyber Security Framework in place based on the US National Institute of Standards and Technology (NIST) Framework; ICT end user policies in place with mandatory employee training; Ongoing IT upgrades and patching of systems; Monitoring, testing and reporting of IT traffic, IT security, cyber threat landscape and expert external advice on emerging trends and cyber threats; Annual simulated spear-phishing campaign and annual 3rd party cyber security posture assessment tracking maturity and benchmarking the NTMA against the industry; and ICT Design Authority in place as a collaborative ICT/ Business group to respond with secure, integrated IT solutions to meet business requirements.

RISK MANAGEMENT (CONTINUED)

Risk	Risk Description and Possible Impact	Risk Mitigation Measures
Operational Risk	The risk of loss or damage resulting from inadequate or failed internal processes or from external events which would affect the NTMA's ability to execute its business strategy. This includes: legal and compliance risk (including data protection), fraud risk; business disruption risk, change and project risk, and process risk. Possible consequences include the potential risk of direct financial impact and loss for the NTMA and/or the State, business disruption, regulatory fine/ sanction and/or reputational damage.	Appropriate operational risk, compliance and data protection policies in place, supported by guidance documents and employee training; Risk and control assessment process ensure control measures are adequate to address operational risks; Key Risk Indicators in place and reported to the relevant risk governance committee; Appropriate use of internal and external professional advice; Dedicated oversight committees for monitoring and reporting of operational risks; An active business continuity management programme, with regular testing of plans and scenarios; and Project boards established for all key strategic projects, with regular reporting produced, resources appropriately allocated and best practice project management methodologies utilised.
People and Behavioural Risk	Risk of failure to recruit, retain and develop a sufficiently skilled and experienced workforce, and/or maintain positive workplace behaviours. If the NTMA does not have people with the right skills or cannot retain, attract and develop talent and leadership (including succession planning), it may adversely impact NTMA's ability to execute its mandates. In addition, failure of NTMA's employees to behave in a manner consistent with expectations could result in financial loss, business disruption and/or reputational damage.	There is a three year (2019 – 2021) HR strategy in place; The NTMA operates a structured recruitment and selection process; Extensive learning and development programme in place and succession planning undertaken; Promulgation of the Code of Practice for the Governance of State Bodies; A range of HR and Compliance policies and procedures help to ensure best practice in people management and ethical standards; Key internal controls and anti-fraud measures in place; and Regular risk-based internal and external audits.
Third-party Risk	The NTMA relies on a number of critical third parties in order to deliver its mandates. Failure by the NTMA to oversee and manage critical third parties, or failure by the third-party to deliver on its contractual obligations or act in a manner consistent with NTMA's expectations could lead to business disruption, financial and/or reputational damage.	Third-Party Risk Management Policy in place, with supporting guidance; Due diligence, risk assessment, ongoing monitoring, oversight and reporting of critical third-party arrangements and performance; Third-party contracts formally reviewed and approved by internal management and external legal advisers as appropriate; Technical ICT advisory provided as part of the tendering process for new technology services; and Assessment and approval process of third-party cloud services.