

## ANNUAL PERFORMANCE PLAN 2020-2021



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## ACRONYMS

AGSA	Auditor-General of South Africa
APP	Annual Performance Plan
САР	Compliance Assurance Plan
CoE	Certificate of Exemption
CoR	Certificate of Registration
CNSS	Centre for Nuclear Safety and Security
DMRE	Department of Mineral Resources and Energy
EWSETA	The Energy and Water Sector Education and Training Authority
ICT	Information Communication and Technology
IRP	Integrated Resource Plan
4IR	Fourth Industrial Revolution
GW	Gigawatt
KNPS	Koeberg Nuclear Power Station
LTO	Long-Term Operation
MTSF	Medium-Term Expenditure Framework
NDP	National Development Plan
NPP	Nuclear Power Plant
NECSA	South African Nuclear Energy Corporation
NIL	Nuclear Installation Licences
NVL	Nuclear Vessel Licences
NORM	Naturally Occurring Radioactive Material
NNR	National Nuclear Regulator
NTWP	Nuclear Technology and Waste Products
NRWDI	National Radioactive Waste Disposal Institute
PESTEL	Political, Economic, Social, Environmental, Technological, and Legislative
PFMA	Public Finance Management Act
PLEX	Plant Life Extension
PPPFA	Preferential Procurement Policy Framework Act
RADCON	Radiation Control
RITS	Regulatory Improvement and Technical Services
RERC	Regulatory Emergency Response Centre
SANAS	South African National Accreditation System
SETA	Sector Education and Training Authority
SER	Safety Evaluation Report
SMR	Small Modular Reactors
SWOT	Strengths, Weaknesses, Opportunities and Threats

Table 1: List of Acronyms

## EXECUTIVE STATEMENTS & OFFICIAL SIGN-OFF

### **EXECUTIVE AUTHORITY STATEMENT**

The National Nuclear Regulator's Annual Performance Plan for the financial year 2020-21 is hereby presented.

The NNR is a regulatory body established in terms of Section 3 of the National Nuclear Regulator Act, No.47 of 1999. Past performance and industry requirements continue to affirm its relevance and future prospects in serving the country.

During this 2020-21 Medium Term Strategic Framework, the Regulator contributes towards priority no: 6 under Social Cohesion and Safe Communities. As a result the following remain focal points for the Regulator:

First, the approval of the much anticipated Integrated Development Plan (IRP) provides certainty in terms of Government's plans for the nuclear industry. The NNR remains poised to successfully achieve its key strategic regulatory goals, particularly towards key future milestones, including the planning of the Long-Term Operation (LTO) or life extension of Koeberg Nuclear Power Plant.

Secondly, industry discussions regarding Small Modular Reactors (SMR) aimed at increasing an estimated 2.5GW are of interest to the NNR. This will mean capacitating the Regulator to ensure an adequate regulatory framework to address these new industry developments. Thirdly, discussions arising from the recent Mining Indaba, held on 3 February 2020, remain of interest, as they impact on the NORM (Naturally Occurring Radioactive Material) facilities we regulate, most of which are mines. We are aware that some licence holders are considering producing their own power and connecting it to the grid, in light of the current national problem of intermittent electricity supply. It is not yet clear what these developments will be on nuclear and radiation safety.

The fourth point relates to the presence of Radon in dwellings and contaminated sites. This remains a concern for the NNR, and all the relevant regulatory considerations will be explored further during the current financial year. In this financial year, the Regulator plans to conduct a benchmarking exercise on the Regulatory Framework for Radon in dwellings. This will assist in the development of relevant policies and regulatory instruments for South Africa.

Lastly, the organisation aims to remain financially viable, despite the current national financial crisis. Authorisation fees and fiscal constraints will remain a tight rope to tread as the Regulator strives to maintain a balance between meeting its set targets, and complying with austerity measures as pronounced by the Government. Developments in data processing and online intrusive measures have also raised challenges around cyber security and data fraud. The NNR will be exploring further approaches to address these during this Medium-Term Strategic Framework (MTSF). On the other hand, advances in computing technology propel the NNR to be innovative and adapt to changes as appropriate.

One of the NNR's long-term goals is to see its key project - the Centre of Nuclear and Safety and Security (CNSS) - being the innovation hub of nuclear research and education in Africa. This will be one of its kind in the history of South Africa and Africa as a whole. The development of this work began in 2019-20, and will continue during the 2020-21 financial year as outlined in the Annual Performance Plan.

In conclusion, I would like to take this opportunity to thank the Minister of Mineral Resources and Energy, members of his department, the Board of the NNR, as well as the staff of the Regulator for their commitment, and the passion with which they strive to fulfill the mission of the organisation. The NNR will always strive to deliver on its vision, while maintaining a high performance culture.

**Dr Thapelo Motshudi** Chairperson of the Board National Nuclear Regulator

### ACCOUNTING OFFICER STATEMENT

I am honored to present the 2020-21 Annual Performance Plan of the National Nuclear Regulator. This Strategy was developed in line with the Revised Framework for Strategic Plans and Annual Performance Plans.

The past year's journey was insightful, marked by both challenges and achievements. The NNR ensured that key initiatives were planned for and implemented to achieve our regulatory mandate and functions.

These include, amongst others, the application for the NNR Lab Accreditation by SANAS which will continue until the 2021-22 financial year; the testing of the effectiveness and response to a nuclear radiological emergency was achieved through an exercise by conducting a full scope Regulatory Emergency Response Centre referred as the (RERC) exercise in November 2019.

The Regulator was faced with the need to strengthen regulation regarding safety culture at the various authorised facilities. The Regulator has embarked on initiatives to ensure the shift in safety culture at authorised facilities by requiring focused improvement programmes such as Leadership development, staff awareness, and key supporting processes. To this end, it is evident through our previous plans that NNR employees are committed to the work. Our employees have performed with great strides and made the year 2019-20 a success. They ensured diligence in inspections, reviews, assessments and ensuing the enforcement actions. Our planning and reporting have been consistently compliant with requisites of quality levels.

It is within this context that we look forward to implementing our planned goals and priorities of Government as contained in the National Development Plan in order to achieve social cohesion and safer communities. We will do this by protecting our people, property and the environment from harmful effects of radiation.

We anticipate strengthened working relationships with our stakeholders for the betterment of South Africa. I therefore invite all our stakeholders to fully support our strategy and plan in order to ensure that the NNR is rightfully positioned.

**Dr Mzubanzi Bismark Tyobeka** Chief Executive Officer National Nuclear Regulator

### **OFFICIAL SIGN-OFF**

It is hereby certified that this Annual Performance Plan:

- Was developed by the Board of Directors and Management of the National Nuclear Regulator and,
- Takes into account all relevant policies, legislation and other mandates for which the National Nuclear Regulator is responsible.
- It accurately reflects the the outcomes and outputs which the NNR will endeavour to achieve over the period 2020-21.

Ms. Nontsikelelo Kote Senior Manager: Strategy, Governance and Organisational Performance

Mr. Dakalo Netshivhazwaulu Chief Financial Officer

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**Dr Mzubanzi Bismark Tyobeka** Chief Executive Officer Date: 17 March 2020

Approved by:

**Dr Thapelo Motshudi** Chairperson of the Board Date: 17 March 2020





OUR MANDATE

#### APPLICABILITY OF THE REVISED FRAMEWORK

As a Schedule 3A entity of the State, the National Nuclear Regulator is subject to the government wide guidelines and stipulations in so far as strategic and financial planning is concerned. This is important for two reasons:

- 1. Using the revised framework assists the NNR's Strategic Plan to demonstrate alignment to overall Energy Policy and the Department of Mineral Resources and Energy's strategy in both content and format.
- 2. The extent to which the guidelines have been applied by entities is an auditable criterion by the AGSA and thus the NNR must also demonstrate adherence to this.

The NNR's plan is developed and on a five (5) rolling plan determined by the manifesto and term of office of the ruling party. The annual performance plan will be developed as guided by the framework.



Figure 1: Overview of Guidelines of the Framework.

The Revised Framework applies to all national departments, provincial departments and government components listed respectively in Schedule 1, Schedule 2 and Schedule 3 of the Public Service Act (1994), as amended by Act 30 of 2007; and to constitutional institutions listed in Schedule 1 and public entities listed in Parts A and C of Schedule 3 of the Public Finance Management Act (PFMA) Act No. 1 of 1999.

#### 1. CONSTITUTIONAL MANDATE

The National Nuclear Regulator (NNR) is a public entity which is established and governed in terms of section 3 of the National Nuclear Regulator Act, (Act No. 47 of 1999). The fundamental objective of the NNR is to provide for the protection of persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory practices suited for South Africa. To this end, the NNR provides oversight and assurance that activities related to peaceful use of nuclear energy in South Africa are carried out in a safe manner and in accordance with international principles and best practices.

The NNR derives its mandate from the Constitution of the Republic of South Africa of 1996 in that it is vested with the legal obligation to protect the environment against nuclear damage. Hence the strategy adopted by the NNR seeks to be congruent with the provisions of section 24 of the Constitution more specifically chapter 2 of the Bill of Rights which reads as follows:

24 Everyone has the right-

(a) to an environment that is not harmful to their health or wellbeing; and

(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –

- (i) prevent pollution and ecological degradation;
- (ii) promote conservation;

#### 2. LEGISLATIVE AND POLICY MANDATE

As a Schedule 3A State-Owned Entity, the NNR's mandate is derived from Section 3 of the National Nuclear Regulator Act, No. 47 of 1999. The Act gives effect to the NNR to provide the following responsibilities as stated below:

The NNR contributes to Programme 5 of the Department of Mineral Resources and Energy, on nuclear energy.

The purpose of Programme 5 is to manage the South African nuclear sector in terms of international obligations, nuclear legislation and policies to ensure the peaceful use of nuclear energy and nuclear technologies.

The programme has the following sub-programmes:

- Nuclear Safety and Technology;
- · Nuclear Non-proliferation and Radiation Security;
- · Nuclear Policy.

The following is some of the legislation the NNR must comply with:

LEGISLATION		
Basic Conditions of Employment Act, No. 75 of 1997	Promotion of Administrative Justice Act, No. 3 of 2000	
Broad Based Black Economic Empowerment Act, No. 53 of 2003 and 2014 Code	Protected Disclosures Act, No. 26 of 2000	
Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993	Protection of Equality and Prevention of Unfair Discrimination Act, No. 4 of 2000	
Constitution of the Republic of South Africa, 1996	Protection of Information Act, No.84 of 1982	
Electronic Communications and Transactions Act, No. 25 of 2002	Protection of Personal Information Act, No. 4 of 2013	
Employment Equity Act, No. 55 of 1998	Promotion of Access to Information Act, No. 2 of 2000-Public Bodies	
Government Immovable Assets Act, No.19 of 2007	Public Finance Management Act, No. 1 of 1999-Public Entities Schedule 3	
Income Tax Act, No. 58 of 1962	Regulation of Interception of Communications and Provision of Communications and Provision of Communication-related information Act, No. 70 of 2002	
Intergovernmental Relations Framework Act, No.13 of 2005	Skills Development Act, No.97 of 1998	
Labour Relations Act, No. 66 of 1995	Skills Development Levies Act, No. 9 of 1999	
National Archives and Record Service of South Africa Act, No. 43 of 1996	Tobacco Products Control Act, No. 83 of 1993	
National Environmental Management - Waste Act, 59 of 2008	Unemployment Insurance Act, No. 63 of 2001	
Occupational Health and Safety Act, No. 85 of 1993	Unemployment Insurance Contributions Act, No. 4 of 2002	
Pension Funds Act, No. 24 of 1956	Unemployment Insurance Act, No. 63 of 2001	
Preferential Procurement Policy Framework Act, No. 5 of 2000	Use of Official Languages Act, No. 2 of 2012	

Table: 2 Relevant Legislation Regulating the NNR.

#### 3. INSTITUTIONAL POLICIES AND STRATEGIES

As outlined in the Revised Framework, Government institutions are accountable to the citizens, through parliament, for delivering on national development priorities. Therefore, the National Nuclear Regulator's strategic plan must be aligned with government priorities.

These priorities, though enduring, are refined on an annual basis based on key governmental priorities as highlighted in the annual State of the Nation Address (SONA).

The framework stipulates that all national, provincial and local government institutions must ensure that the NDP priorities are reflected in their institutional SPs and APPs, as described in the MTSF for the relevant planning cycle. In July 2019, the government adopted seven (7) priorities to take South Africa forward. Amongst the priorities, the NNR adopted the theme Social Cohesion and Safe Communities; this is achieved through our mandate by ensuring for the protection of persons, property and the environment.

Furthermore, in relation to the NDP, the NNR contributes through co-ordinating bursaries and sponsorships to students in the Science, Engineering, Technology and Mathematics sphere. The NNR provides the youth of South Africa with exposure to the industry by offering work-integrated learning programmes through the Energy and Water Sector Education and Training Authority (EWSETA). The NNR hosts vocational work as well as research and development initiatives carried by the Centre for Nuclear Safety and Security (CNSS).

#### 4. RELEVANT COURT RULINGS

In the current planning cycle, no new court rulings were identified. The MacDonald case regarding the development in zoned areas in 2011 remains the most recent ruling relevant to the NNR.



## Part B:

OUR STRATEGIC FOCUS

#### **1. SITUATIONAL ANALYSIS OF THE NNR**

The NNR developed its situational analysis from key information obtained during the planning process, and it is aligned to the institution's strategic focus.

The NNR's situational analysis was developed and informed by PESTEL and SWOT tools as well as the NNR's Stakeholder Engagement Session. The situational analysis provides a broad overview of the external and internal perspective; it allows the organisation to define its key drivers for the current strategy.

#### 2. EXTERNAL SITUATIONAL ANALYSIS

The PESTEL analysis was updated to highlight the followings:

POLITICAL	FACTORS	CHALLENGES AND RESPONSE
	Frequent change in ministerial appointments	Changes in ministerial appointments
	causes instability and uncertainty, thus	have always been a challenge as it
	leading to delays in processes and	delays amendments of certain NNR
	implementation of key national policies and	Acts, regulations as well as key national
	projects as well as legislative improvements.	policies.
	<ul> <li>Issues around global relations and</li> </ul>	• This is out of the NNR's control.
	geopolitical relationships could impact policy	Continuous stakeholder engagement
	in South Africa broadly, which may in turn	will be strengthened and maintained to
	impact on the NNR.	ensure appropriate regulatory response
	The current allegations of the widespread	where necessary.
	corruption in South Africa may compromise	
	operations and the quality of regulation.	
	The envisaged transfer of the RADCON	The transfer of RADCON from the
	function from the Department of Health	Department of Health is still pending.
	to the NNR will widen the scope of	
	the Regulator and thus require further	
	capacitation.	

ECONOMIC	FACTORS	CHALLENGES AND RESPONSE
	<ul> <li>Labour unrest, illegal mining and service delivery protests in local mining communi- ties adversely affect both the authorisation holders and communities surrounding the mines, economically and socially.</li> </ul>	<ul> <li>This poses a threat to the Regulator as some of its key activities including inspec- tions have to be put on hold due to civil unrest.</li> </ul>
	<ul> <li>The downturn in the economy may impact adversely on some authorisation holders' ability to pay fees to the NNR as well as compromising the safety of their opera- tions including the financial provision for decommissioning and (nuclear) waste management.</li> </ul>	<ul> <li>The economic downturn is also impact- ing on the NNR as some of the mines are closing down while some which are smaller are unable to pay their fees.</li> </ul>

ECONOMIC	FACTORS	CHALLENGES AND RESPONSE
	<ul> <li>Limited funding i.e. state grant reduction and limitations to authorisation fees in- crease adversely affect the NNR's pro- grammes and budgets.</li> </ul>	<ul> <li>The Regulator may not be able to cover the requisite scope of work in executing its mandate.</li> </ul>
	<ul> <li>The number of smaller entities regulated by the NNR has reduced by about 15% but has had little impact on revenues.</li> </ul>	<ul> <li>The Regulator's debt control processes are robust enough to identity problemat- ic areas and respond concomitantly.</li> </ul>
SOCIAL	FACTORS	CHALLENGES AND RESPONSE
	<ul> <li>The impact on the Regulator is threats to physical safety of inspectors which may negatively impact on the compliance as- surance programme.</li> </ul>	<ul> <li>Land grabs are a social threat. From the NNR's perspective they may expose communities to hazards as verification of the safety of some of the land my not</li> </ul>
	<ul> <li>Land grabs are the new social threat. This may expose communities to hazards as there may not always be sufficient verifica- tion of the safety of some of the land.</li> </ul>	yet be conducted.
	<ul> <li>Negative perceptions, as a result of his- toric global nuclear accidents may erode public trust and confidence in the nuclear industry. This negative perception leads to a misunderstanding of the role of the Regulator.</li> </ul>	<ul> <li>Awareness campaigns and informa- tion-sharing forums on the role of the Regulator may address negative percep- tions over time.</li> </ul>
	<ul> <li>Public demand for openness and transpar- ency is growing and will have to be part of the organisation's program. Currently, there are low levels of public awareness on nuclear safety and emergency pre- paredness.</li> </ul>	
	<ul> <li>Authorisation holders' compliance be- haviour has regressed placing additional burden on the NNR.</li> </ul>	<ul> <li>Periodic safety and security assessments will be conducted.</li> </ul>

TECHNOLOGICAL	FACTORS	CHALLENGES AND RESPONSE
	Technological advancement may mean	The Regulator will need to keep abreast and
	that a different set of skills will be re-	actively participate in the developments of
	quired from the Regulator going forward.	Small Modular Reactor (SMR) technology.
	The envisaged beneficiation of uranium	Developments in technology will require the
	will introduce new technologies into	NNR to ensure that it can keep abreast with
	the South African market and will also	the changes and respond appropriately to
	influence changes to nuclear safety and	each.
	security for the Regulator.	
	Online information exchange platforms	
	are a growing trend and the Regulator	
	should adapt to this.	
	Cyber security, data fraud and theft are	
	becoming an increasing threat that the	
	Regulator and authorisation holders must	
	manage and protect against.	
	Ageing management of facilities continue	
	to warrant interventions, expertise and	
	new technologies to be applied.	
	Advancements in technology will contin-	
	ue to impact nuclear safety and security.	
	Technical skills in regulated entities have	
	regressed due to people leaving for other	
	opportunities.	
ENVIRONMENTAL	FACTORS	CHALLENGES AND RESPONSE
	Climate change may impact the safety of	Investigation into the radioactivity in water
	installations.	related to acid mine drainage is a concern
	Environmental contamination from legacy	for the NNR. Efforts will be made to ensure
	sites and ownerless mines in South Africa	a multi-stakeholder response for the safety
	are still a challenge.	of persons, property and the environment.
	Management of high-level radioactive	
	waste requires careful consideration of	
	society.	
	Regulator involvement in proposed ur-	Implementation of beneficial co-operative
	ban planning needs to be enhanced so as	agreements is increasingly becoming an imper-
	to ensure that there is no undue impact	ative for the NNR (in order to address some of
	on the emergency planning zones.	the factors).
LEGISLATIVE	FACTORS	CHALLENGES AND RESPONSE
	• Delays in the promulgation of the amend-	Continue to raise this risk with the depart-
	ments of the NNK Act and regulations	ment.
	This has become a major rick to the NND	
	and radiation safety	
	Emorging technology may impact on locials	
	tive requirements	
	uve requirements.	

Table 3: PESTEL Analysis.

#### **3. INTERNAL SITUATIONAL ANALYSIS**

The SWOT analysis was updated to highlight the following:

STRENGTHS	WEAKNESSES
<ul> <li>The NNR Regulatory Framework is estab- lished and effective.</li> </ul>	<ul> <li>Internal stakeholder communication needs improvement.</li> </ul>
<ul> <li>The NNR mandate is legislated and unam- biguous.</li> </ul>	<ul> <li>Lack of effective knowledge transfer may result in skills gap.</li> </ul>
<ul> <li>Skilled personnel are a key feature of the Regulator.</li> </ul>	<ul> <li>Unionised management poses a potential conflict of interest.</li> </ul>
There is an established structure to deliver the current mandate.	The NNR is not sufficiently innovative.
Effective and innovative Board.	
<ul> <li>Stimulating and challenging scope of activ- ities.</li> </ul>	
<ul> <li>Developed and maintained a sound, en- abling and high-performance culture.</li> </ul>	
<ul> <li>Bilateral relationships facilitate co-opera- tion and sharing of good practices.</li> </ul>	
The NNR is largely achieving its mandate.	
OPPORTUNITIES	THREATS
OPPORTUNITIES     Stakeholder engagement has improved and opportunities to enhance it further exist.	<ul> <li>THREATS</li> <li>Decline in certificate of registration as investments in mines declines.</li> </ul>
<ul> <li>OPPORTUNITIES</li> <li>Stakeholder engagement has improved and opportunities to enhance it further exist.</li> <li>More effective harmonisation of regulation of medical sources and radioactive material.</li> </ul>	<ul> <li>THREATS</li> <li>Decline in certificate of registration as investments in mines declines.</li> <li>Non-paying authorisation holders adversely affect the Regulator's financial sustainability.</li> </ul>
<ul> <li>Stakeholder engagement has improved and opportunities to enhance it further exist.</li> <li>More effective harmonisation of regulation of medical sources and radioactive material.</li> <li>The new structure enhances capability to regulate more effectively.</li> </ul>	<ul> <li>THREATS</li> <li>Decline in certificate of registration as investments in mines declines.</li> <li>Non-paying authorisation holders adversely affect the Regulator's financial sustainability.</li> <li>Delays in revision of the regulatory framework hampers enhancement of the nuclear and radiological safety.</li> </ul>
OPPORTUNITIES         Stakeholder engagement has improved and opportunities to enhance it further exist.         More effective harmonisation of regulation of medical sources and radioactive material.         The new structure enhances capability to regulate more effectively.         Capability to regulate small nuclear reactors (SMR-PBMR experience).	<ul> <li>THREATS         <ul> <li>Decline in certificate of registration as investments in mines declines.</li> <li>Non-paying authorisation holders adversely affect the Regulator's financial sustainability.</li> <li>Delays in revision of the regulatory framework hampers enhancement of the nuclear and radiological safety.</li> <li>Fiscal austerity measures and reduction in budgets of authorisation holders negatively impact regulatory resources.</li> </ul> </li> </ul>
<ul> <li>OPPORTUNITIES         <ul> <li>Stakeholder engagement has improved and opportunities to enhance it further exist.</li> <li>More effective harmonisation of regulation of medical sources and radioactive material.</li> <li>The new structure enhances capability to regulate more effectively.</li> <li>Capability to regulate small nuclear reactors (SMR-PBMR experience).</li> <li>Shift in people management to a modern workplace where outcomes and not attendance is measured.</li> </ul> </li> </ul>	<ul> <li>THREATS</li> <li>Decline in certificate of registration as investments in mines declines.</li> <li>Non-paying authorisation holders adversely affect the Regulator's financial sustainability.</li> <li>Delays in revision of the regulatory framework hampers enhancement of the nuclear and radiological safety.</li> <li>Fiscal austerity measures and reduction in budgets of authorisation holders negatively impact regulatory resources.</li> <li>Changes in national plans and political leadership instability creates uncertainties (unpredictability of policies).</li> </ul>

Table 4: SWOT Analysis.

#### 3.1 Stakeholder Engagement

During the current planning cycle, the NNR held its Stakeholder Engagement Session. The aim of the session was to hear from authorisation holders what the Regulator should anticipate in the medium to long term in the regulated activities.

Below are the authorisation holders' and stakeholders' key roles, the impact they have on the NNR, the influence as well as how the Regulator should respond.

STAKEHOLDER NAME	KEY CHARACTERISTICS	
Department of Mineral Resources and Energy	<ul> <li>Individuals who have high level of knowledge and involvement in the nuclear regulator industry.</li> <li>They are the decision-makers and opinion leaders.</li> <li>The Minister of Mineral Resources and Energy appoints Board members.</li> <li>Individuals with high level of knowledge and involvement in the mines we work with as well as the nuclear regulated industries.</li> </ul>	
Sibanye Still Waters, Harmony Gold and other relevant mining houses	<ul> <li>Provide value creation for all stakeholders through the responsible mining and beneficiation of mineral resources.</li> </ul>	
NECSA	<ul> <li>Provides value creation through the nuclear research reactor and production of nuclear products.</li> <li>Focus on people, safety and sustainability.</li> </ul>	
NRWDI	<ul> <li>Provides management and disposal of radioactive waste.</li> <li>Ensures the protection of persons, property and the environment.</li> </ul>	
ESKOM	<ul> <li>Knowledgeable experts in the nuclear power station operation.</li> <li>Subject matter experts.</li> </ul>	

Table 5: The NNR Stakeholder Engagement.

IMPACT ON THE REGULATOR	INFLUENCE ON THE NNR	RESPONSE/ STRATEGY BY THE NNR
<ul> <li>One of the NNR's key strategic stakeholders, therefore, if formal working relationships are not maintained it will lead towards asymmetry of information.</li> <li>The NNR is dependent on their co-operation and goodwill.</li> </ul>	• Has the ability to influence the NNR's independence.	<ul> <li>Continuous engagements and involvement in ensuring nuclear safety.</li> <li>Engagements regarding legacy sites.</li> <li>Strengthen stakeholder relationship.</li> <li>Continue having regular interactions, forums and meetings.</li> </ul>
<ul> <li>One of the NNR's key strategic stakeholder, focuses on employee safety and health in the mining sector.</li> </ul>	<ul> <li>NNR is a better position to provide and protect persons, property and the environment.</li> </ul>	<ul> <li>Continuous engagements and involvement.</li> </ul>
<ul> <li>They are one of our key strategic partners.</li> <li>Government policy changes related to nuclear may impact on Necsa's future operations.</li> <li>Strives for enhanced safety culture.</li> </ul>	<ul> <li>NNR is in a better position to provide and protect for the protection of persons, property and the environment.</li> </ul>	<ul> <li>Continue having regular interactions and strengthen co- operation.</li> </ul>
<ul> <li>Institutionalise a culture of nuclear safety and security.</li> <li>Vaalputs NIL.</li> </ul>	<ul> <li>Provides the NNR with the ability to ensure and provide for the protection of persons, property and the environment.</li> </ul>	<ul> <li>Continue having regular interactions and strengthen co- operation.</li> </ul>
<ul> <li>Eskom will take future direction on new build from the IRP.</li> <li>The Nuclear Energy Policy of 2008 (NEP2008) designates Eskom as majority owner and operator of nuclear power plants in SA.</li> </ul>	<ul> <li>Provides the NNR with the aim of ensuring the regulatory framework is enhanced for a new build programme.</li> <li>Commitment is needed to regulate LTO.</li> </ul>	<ul> <li>More engagement and collaboration, particularly on safe operations of the Koeberg Nuclear Power Station.</li> </ul>

#### 3.2 Stakeholder Map

The strategy is most useful and effective when aligned with stakeholder needs. The NNR has for that reason engaged in a stakeholder mapping exercise and defined the types of linkages that the organisation has with various stakeholder groupings as per Figure 2 below;



Figure 2: The NNR Stakeholder Map.

- 1. Enabling stakeholders have some control and authority over the organisation and could include the Board of Directors, legislators and regulators among others. The NNR is reliant on these stakeholders for decision-making, guidance and directives necessary for the NNR to operate.
- 2. Normative linkages are those groups with whom the organisation has a common interest and shares similar values, goals or problems. There is sharing and exchange of information, knowledge, practices etc.
- **3. Diffused linkages** are those stakeholders who become involved based on specific actions. They could include the community, activists and special interest groups. These are interested parties who may have a similar goal of safety as the Regulator but may vary on their views regarding processes. The Regulator needs to share as much information with this group in line with the key driver on communicating regulatory processes and decisions.
- 4. Functional linkages are essential for the functioning of the organisation. Some are involved in the input of the organisation such as employees and suppliers, and others form part of the output of the organisation such as consumers and retailers. The stakeholders provide outputs of various natures for review, assessment and inspection by the Regulator. These stakeholders expect approval, guidance and regulations. The second group of stakeholders, still under functional linkages, provides inputs to the Regulator and these include internal stakeholders as well as partners.

#### 3.3 The NNR Structure

The NNR structure defines the major categorisation of roles in the organisation. The NNR is led by a Board of Directors (Board) in line with the prescripts of the NNR Act. The Board is appointed by the Minister of Mineral Resources and Energy and currently has sub-committees. Committees are made up of Board members and form part of the Transformation and Development Committee, the Audit and Risk Management Committee and the Technical Committee.

The Chief Executive Officer of the NNR is appointed by the Minister of Mineral Resources and Energy in line with the NNR Act. The CEO, in consultation with the Board appoints the Executives. Currently the NNR has five Executives in the areas of Finance, Nuclear Power Plant(s), Nuclear Technology and NORM, Regulatory Improvement and Technical Services, and Corporate Support Services, which includes Communications and Stakeholder Relations Management.

There are strategic units placed under the ambit of the CEO and/or the Board. These are the Internal Audit which services the Board and reports to the Chairman of the Audit and Risk Management Committee functionally, and administratively to the CEO. The Board Secretariat services the Board and reports to the Chairman of the Board, including the Legal Services and Risk Management as well as the Strategy and Organisational Performance. Collectively, these are referred to as the Office of the CEO. The NNR staff complement is 179, this includes interns, temporary workers as well as inspectors in training.



The approved summarised structure of the NNR is depicted in Figure 3 below.

Figure 3: The NNR Structure



# Part C:

MEASURING OUR PERFORMANCE

#### 1. INSTITUTIONAL PROGRAMME INFORMATION

An overview of the NNR broad functions, also referred to as outcomes, can be viewed in Table 6 below:

PROGRAMME	PROGRAMME PURPOSE
The Board of Directors	The Board sets the direction and governs the Regulator in accordance with the NNR Act. The Board develops the strategic plan and oversee the organisation's performance with regards to the stated strategic objectives as well as being responsible for overseeing the risk-based Internal Audit.
	The Board Secretariat services the Board and reports to the Chairman of the Board.
Office of the CEO	<ul> <li>As the face of the organisation, the Office of the CEO has the overall responsibility. The functions in this office include:</li> <li>1) Legal Services and Enterprise Risk Management;</li> <li>2) Strategy, governance and organisational performance; responsible for the implementation of the organisation's strategic plan; oversees the performance of operations including the development of the organisational performance, reporting; the monitoring of strategic projects; and maintaining order through governance.</li> <li>3) Internal Audit (reporting to the Board's Audit and Risk Management Committee functionally, and administratively to the CEO), is responsible for conducting risk-based internal audits in all divisions/departments of the NNR.</li> </ul>
Financial Management	<ul> <li>Programmes in this portfolio provide organisational support in the area of financial management and administration. This is done through the following key functional streams: <ol> <li>Financial planning and management,</li> <li>Financial reporting,</li> <li>Asset management and supply chain management (procurement),</li> <li>Accounts payable,</li> <li>Accounts receivable and cash book management and payroll management</li> </ol></li></ul>
Regulation of Nuclear Power Plant	<ul> <li>The NPP programme focuses on a holistic approach towards regulating safety and security for Nuclear Power Plants technology. In terms of its core functions it delivers on the <ol> <li>Compliance assurance and enforcement activities,</li> <li>Reviews, assessments and general oversight of the KNPS licence.</li> </ol> </li> <li>Additionally, the programme focuses on issuing of authorisations for Nuclear Vessel Licences (NVL), licence change request, and management of NPP projects throughout the facility life-cycle.</li> </ul>

PROGRAMME	PROGRAMME PURPOSE
Regulation of	The NTN comprises of two sub-programmes focussing on:
Nuclear Technology and NORM	<ol> <li>The regulation of nuclear technology and waste projects including various nuclear and radiation facilities on the Necsa Pelindaba site, Vaalputs National Radioactive Waste Disposal Facility; as well as</li> <li>The regulation of facilities and activities involving NORM and public radiation exposure from previously contaminated NORM sites as well as radon.</li> </ol>
	The NTN programme provides a holistic approach towards regulating nuclear and radiation safety as well as nuclear and radiation security. The programme focuses on the issuing of nuclear authorisations including Nuclear Installation Licences (NIL), Nuclear Vessel Licences (NVL), Certificates of Registration (CoR) and Certificates of Exemption (CoE) and amendments thereto, as well as conducting reviews and assessments related to the safety of these facilities and activities. Further, it delivers on the compliance assurance and enforcement activities, which include conducting inspections, investigations, surveillances and environmental monitoring and sampling related to nuclear technology facilities and activities.
Regulatory	The RITS division provides cross-cutting nuclear safety services to all NNR's
Improvement and	technical departments.
Technical Services (KITS)	In terms of its core functions RITS performs the following:
	<ol> <li>In-depth nuclear safety reviews and assessments for all the regulated facilities,</li> </ol>
	2) Conducts independent verification by computer codes,
	3) Delivers emergency preparedness and response services,
	<ol> <li>Laboratory services,</li> <li>Development of regulatory standards and puckear projects.</li> </ol>
	<ul><li>6) Co-ordination of nuclear security and the safety and security culture functions.</li></ul>
	A key component of this programme is the regulatory research and development
	which is conducted on emerging issues regarding nuclear and radiation safety
	housed under the flagship of the Centre for Nuclear Safety and Security (CNSS).
Corporate Support	This programme provides strategic organisational support through the key
Services	tunctions of:
	2) Knowledge and information management.
	<ol> <li>3) Integrated management system,</li> </ol>
	4) Facilities management,
	5) Information communication and technology,
	6) Security and occupational health and safety
	7) Communication and stakeholder relations management.

Table 6: Programme Information.

#### 1.1 Technical Programmes

#### **Regulation of Nuclear Power Plant (NPP) Profile**

The NPP division focuses on a holistic approach towards regulating safety and security for Nuclear Power Plants. In terms of its core functions it delivers on the compliance assurance and enforcement activities, reviews and assessments and general oversight of the KNPS licence. Additionally, the programme focuses on issuing of authorisations for Nuclear Vessel Licences (NVL), licence change request, and management of NPP projects throughout the facility life-cycle.

#### Regulation of Nuclear Technology and NORM (NTN) Profile

The NTN programme provides a holistic approach towards regulating nuclear and radiation safety as well as nuclear and radiation security. The programme focuses on the issuing of nuclear authorisations including Nuclear Installation Licences (NIL), Nuclear Vessel Licences (NVL), Certificates of Registration (CoR) and Certificates of Exemption (CoE) and amendments thereto, as well as conducting reviews and assessments related to the safety of these facilities and activities.

Further, it delivers on the compliance assurance and enforcement activities, which include conducting inspections, investigations, surveillances and environmental monitoring and sampling related to nuclear technology facilities and activities, radioactive waste management at all identified NORM facilities.

#### **Regulatory Improvement & Technical Services (RITS) Profile**

The RITS division provides cross-cutting nuclear safety services to all NNR's technical departments.

In terms of its core functions RITS performs in-depth nuclear safety reviews and assessments for all the regulated facilities, conducts independent verification by computer codes, delivers emergency preparedness and response services, laboratory services, development of regulatory standards and nuclear projects, co-ordination of nuclear security and the safety, and security culture functions.

A key component of this programme is the regulatory research and development which is conducted on emerging issues regarding nuclear and radiation safety housed under the flagship of the CNSS.

#### **1.2 Our Performance**

The Department of Planning, Monitoring and Evaluation revised its Framework for Strategic and Annual Performance Plans which should be implemented by both the national and provincial spheres of government. The framework stipulates that institutions should provide an impact statement to which an institution contributes, as informed by legislative or policy mandate. The NNR's statement is as follows:

#### Why we exist

The NNR exists to monitor and enforce regulatory safety standards for the achievement of safe operating conditions, prevention of nuclear accidents or mitigation of nuclear accident consequences, resulting in the protection of workers, public, property and the environment against the potential harmful effects of ionising radiation or radioactive material.

The overall impact statement of the NNR towards its key planned activities in the long-to-medium term is supported by its vision and mission statement and will contribute to Priority 6: Social Cohesion and Safe Communities, and is therefore crafted as:

IMPACTA South Africa that is safe from nuclear and radiation damage and ensured safetySTATEMENTtowards persons, property and the environment.

#### 2. OUR OUTCOMES, OUTPUTS, PERFORMANCE INDICATORS AND TARGETS

OUTCOME		OUTPUTS	OUTPUT INDICATORS	AUDITED PERFORMANCE	ESTIMATED PERFORMANCE	
				2018-19	2020-21	
	To provide an independent radio- analytical verification capability and capacity.	SANAS <sup>1</sup> Accreditation: Gamma Spectrometry Method: NORM Soil & Sediments.	RM1: SANAS accreditation application form	New KPI 2019/20	No information available.	
	To establish and promote a strong safety culture.	Implementation of the Safety Culture Improvement Plan	RM2: % of activities as per the Safety Culture Improvement Plan	New KPI 2019/20	No information available.	
	To implement regulatory programmes to assure	Compliance assurance activities conducted	RM3a: % implementation of the CAP <sup>2</sup>	100% of the CAP	No information available.	
effective nuclear safety regulation.	Reviews and assessments undertaken	RM3b: % of planned reviews and assessment undertaken	100%	No information available.		
		NORM <sup>3</sup> conditions of authorisation reviewed	RM3c: No. of NORM conditions of authorisations reviewed	New KPI 2019/20	No information available.	
		Regulation of public exposure resulting from radon.	RM3d: Conduct benchmark studies on Regulatory Framework for Radon in Dwellings	New KPI 2019/20	No information available.	
	To strengthen regulatory framework- Long-Term Operation.	Resource Plan for LTO <sup>4</sup>	RM4: Approved Resource Plan for LTO	New KPI 2020/21	No information available.	
	To ensure the long-term sustainability of the CNSS.	Approved Integrated CNSS Sustainability Plan	RM5: Approved Integrated CNSS Sustainability Plan	New KPI 2020/21	No information available.	
	To develop and maintain mechanisms to ensure financial viability and sustainability of the	Projected Revenue Report	FM1a: 100% implementation of the gazetted government notice	New KPI 2019/20	No information available.	
organisation.		Sustainability of the CNSS	FM1b: 100% implementation of the pilot plan	New KPI 2019/20	No information available.	
	To accelerate equity in procurement.	Procurement Report	FM2: 50% of procurement spend on designated groups in terms of the PPPFA <sup>6</sup>	50%	No information available.	
	To implement the ICT strategic deliverables.	Effective automation of processes	PM1: 100% implementation of the approved ICT strategic deliverables	100%	No information available.	
	To develop and implement an integrated strategy to enhance corporate image and reputation of the NNR.	Implementation of the approved strategy	LM1:100% implementation of the approved strategy	New KPI 2020/21	No information available	

Table 7: Our Outcomes, Outputs, Performance Indicators and Targets

1 SANAS- South African National Accreditation System 2 CAP- Compliance Assurance Plan. 3 NORM- Naturally Occurring Radioactive Material. 4 LTO- Long Term Operations. 5 SER-Safety Evaluation Report 6 PPPFA- Preferential Procurement Policy Framework Act.

ANNUAL TA	ARGETS			
MTEF PERIOD	YEAR	YEAR	YEAR	YEAR
2020-21	2021-22	2022-23	2023-24	2024-25
SANAS Accreditation Application Form	Extension of accreditation scope	No information available.	No information available.	No information available.
100% of activities implemented	No information available.	Conduct second safety culture self- assessment.	No information available.	No information available.
100% of the CAP	100% of the CAP	100% of the CAP	100% of the CAP	100% of the CAP
100% reviews and assessments per program.	100% reviews and assessments per program.	100% reviews and assessments per program.	100% reviews and assessments per program.	100% reviews and assessments per program.
3 categories reviewed	No information available.	No information available.	No information available.	No information available.
Benchmark report on Regulatory Framework for Radon in Dwellings	Develop an indoor radon regulatory framework concept document for stakeholders' consideration.	No information available.	No information available.	No information available.
Approved Resource Plan for LTO	No information available.	No information available	No information available.	Completed SER⁵ for LTO.
Approved Integrated CNSS Sustainability Plan	Approved sustainability strategy.	Implement CNSS sustainability strategy.	Report on CNSS sustainability strategy outcomes.	Review and update CNSS sustainability strategy.
Revenue Report	Interest charged on all overdue accounts	Interest charged on all overdue accounts	Interest charged on all overdue accounts	Interest charged on all overdue accounts
Report on pilot plan outcomes	Draft final CNSS cost structure incorporating lessons learned on pilot for Board and Minister's approval	Implement the final CNSS costing structure.	Implement the final CNSS costing structure.	No information available.
50% of procurement spend on designated groups in terms of the PPPFA	50% of procurement spend on designated groups in terms of the PPPFA	50% of procurement spend on designated groups in terms of the PPPFA	50% of procurement spend on designated groups in terms of the PPPFA	50% of procurement spend on designated groups in terms of the PPPFA
100% of planned deliverables	100% of planned deliverables	100% of planned deliverables	100% of planned deliverables	100% of planned deliverables
100% of planned deliverables.	100% of planned deliverables.	100% of planned deliverables.	100% of planned deliverables.	100% of planned deliverables.

#### 3. OUR OUTPUT INDICATORS: ANNUAL AND QUARTERLY TARGETS

OUTPUT INDICATOR	ANNUAL TARGETS	Q1	Q2	Q3	Q4
RM1: SANAS accreditation application form	Documents for SANAS Accreditation	N/A	Approved Accredita- tion Plan	Preparation for accreditation	SANAS Accreditation application form
RM2: % of activities as per the safety cul- ture improvement plan.	Report on safety culture	Approved safety cul- ture improvement plan	100 % implemen- tation of planned quarterly delivera- bles	100 % Implemen- tation of planned quarterly delivera- bles	100 % Implemen- tation of planned quarterly delivera- bles Report on safety culture
RM3a: % of imple- mentation of the CAP.	100% of the CAP	100% of the quarter- ly CAP activities	100% of the quarter- ly CAP activities	100% of the quarter- ly CAP activities	100% of the quarter- ly CAP activities
RM3b: % of planned reviews and assess- ments undertaken.	100% reviews and assessments per program	100% of planned quarterly activities	100% of planned quarterly activities	100% of planned quarterly activities	100% of planned quarterly activities
RM3c: No. of NORM conditions of authorisations reviewed.	3 categories re- viewed	Review 3 category conditions of au- thorisation.	Review 4 Category conditions of au- thorisation.	Review 5 catego- ry conditions of authorisation.	N/A
RM3d: Conduct benchmark study on Regulatory Frame- work for Radon in Dwellings.	Benchmark report on Regulatory Framework for Ra- don in Dwellings.	N/A	N/A	N/A	Benchmark report
RM4: Approved Re- source Plan for LTO.	Approved Resource Plan for LTO.	N/A	N/A	N/A	Approved Resource Plan for LTO.
RM5: Approved Integrated CNSS Sustainability Plan.	Approved Integrated CNSS Sustainability Plan	N/A	N/A	Partnerships and Collaboration Frame- work	Approved Integrated CNSS Sustainability Plan
FM1a: 100% imple- mentation of the ga- zetted government notice.	Revenue Report	N/A	Levy interests on overdue debtors.	Report on projected revenue from over- due accounts.	N/A
FM1b: 100% imple- mentation of the pilot plan	Report on pilot plan outcomes	N/A	Conduct pilot service provision with fee structure through CNSS.	Report on the pilot plan	N/A
FM2: 50% of pro- curement spend on designated groups.	50% of procurement spend on designated groups.	N/A	50% of procurement spend on designated groups in terms of the PPPFA	50% of procurement spend on designated groups in terms of the PPPFA	50% of procurement spend on from desig- nate groups in terms of the PPPFA
PM1: 100% of implementation of the approved ICT strategic delivera- bles.	100% Implementa- tion of the approved ICT strategic deliver- ables.	100% of planned deliverables	100% of planned deliverables	100% of planned deliverables	100% of planned deliverables
LM1: 100% of im- plementation of the approved strategy.	100% Implementa- tion of the approved strategy.	100% of planned annual deliverables	100% of planned annual deliverables	100% of planned annual deliverables	100% of planned annual deliverables

Table 8: Outputs Indicators: Annual and Quarterly Targets.

#### 4. EXPLANATION OF PLANNED PERFORMANCE OVER THE FIVE-YEAR PLANNING PERIOD

The NNR outcomes and targets are linked with, and contributes towards achieving the NDP and the MTSF priorities particularly towards social cohesion and safe communities.

#### To provide efficient and effective nuclear regulatory services:

- · Accredited with SANAS to provide an independent analytical verification capability and capacity;
- Safety and security culture;
- · Conduct compliance assurance activities for the protection of persons, property and the environment;
- · Undertake reviews and assessments for the protection of persons, property and the environment;
- Review conditions of authorisations for the protection of persons, property and the environment.

#### To operationalise the CNSS:

• To ensure the long-term sustainability of the CNSS (including its transition from incubation, funding and strategy for each of its pillars).

#### To ensure financial viability and sustainability of the organisation:

Develop mechanisms for projected revenue as well as accelerating procurement in terms of the PPPFA.

#### To provide robust internal business processes:

• Implement approved ICT strategic deliverables.

#### To strengthen and enhance corporate image and reputation:

Develop and implement an integrated strategy to enhance corporate image and reputation of the NNR.

#### 5. PROGRAMME RESOURCE CONSIDERATIONS

STATEMENT OF FINANCIAL PERFORMANCE	BUDGET	AUDITED OUTCOME	BUDGET	AUDITED OUTCOME	BUDGET	AUDITED OUTCOME	BUDGET ESTIMATE	APPROVED BUDGET	
R THOUSAND	201	6/17	201	7/18	2018	3/19	201	9/20	
Revenue									
Tax revenue	-	-	-	-	-	-	-	-	
Non-tax revenue	174 534	183 563	198 145	212 155	211 952	214 320	194 707	223 660	
Sale of goods and services other than capital assets	156 676	161 755	170 776	172 549	180 339	183 647	190 438	199 926	
of which:									
Administrative fees	156 676	161 755	170 776	172 549	180 339	183 647	190 438	199 926	
Sales by market establishment	-	-	_	-	-	-	-	-	
Other sales	-	-	-	-	-	-	-	-	
Other non-tax revenue	17 858	21 808	27 369	39 606	31 613	30 673	4 269	23 734	
Transfers received	40 936	40 936	38 573	38 573	16 510	16 510	43 096	43 096	
Total revenue	215 470	224 499	236 718	250 728	228 462	230 830	237 803	266 756	
Expenses									
Current expenses	215 470	189 370	236 718	235 942	228 462	243 776	237 803	266 756	
Compensation of employees	118 428	124 331	138 156	136 182	142 350	150 367	150 495	165 606	
Goods and services	80 402	48 861	84 675	84 485	72 025	78 646	72 432	87 778	
Depreciation	11 886	10 468	9 801	10 443	10 369	10 854	10 950	9 450	
Interest, dividends and rent on land	4 754	5 710	4 086	4 832	3 718	3 909	3 926	3 922	
Transfers and subsidies	_	-	_	_	_	-	_	-	
Total expenses	215 470	189 370	236 718	235 942	228 462	243 776	237 803	266 756	
Surplus/(Deficit)	-	35 129	-	14 786	-	(12 946)	-	-	

Figure 4: Programme Resource Considerations.

OUTCOME/ BUDGET AVERAGE %	AVERAGE GROWTH RATE (%)	EXPENDI- TURE/ TOTAL: AVERAGE (%)	MEI	DIUM-TERM ESTIN	ЛАТЕ	AVERAGE GROWTH RATE (%)		EXPENDI- TURE/ TOTAL: AVERAGE (%)
	2016/17-2019/20		2020/21	2021/22	2022/23		2019/20 - 2022/2	3
-	-	-	-	-	-		-	-
107,0%	6,8%	85,8%	243 686	255 870	268 664		6,3%	84,2%
102,8%	7,3%	73,8%	235 745	247 532	259 909		9,1%	79,9%
-								
102,8%	7,3%	73,8%	235 745	247 532	259 909		9,1%	79,9%
_	-	_	-	_	_		_	_
-	-	-	-	-	-		-	-
142,8%	2,9%	11,9%	7 941	8 338	8 755		-28,3%	4,3%
100,0%	1,7%	14,2%	45 467	47 740	49 753		4,9%	15,8%
105,9%	5,9%	100,0%	289 153	303 610	318 417		6,1%	100,0%
-								
101,9%	12,1%	100,0%	289 154	303 610	318 416		6,1%	100,0%
104,9%	10,0%	61,8%	174 714	183 450	192 256		5,1%	60,8%
96,8%	21,6%	31,7%	99 081	104 033	109 260		7,6%	33,9%
95,8%	-3,4%	4,5%	11 826	12 417	13 013		11,3%	4,0%
111,5%	-11,8%	2,0%	3 533	3 710	3 888		-0,3%	1,3%
-	-	-	-	-	-		-	-
101,9%	12,1%	100,0%	289 154	303 610	318 416		6,1%	100,0%
	-100,0%		(1)	-	1		-	

#### 6. KEY RISKS AND MITIGATIONS

OUTCOMES	KEY RISKS	RISK MITIGATION
To ensure the long term sustainability of the CNSS including its transition from incubation, funding and strategy for each of its pillars.	Failure to sustain CNSS programmes in the long-term.	<ul> <li>Obtain ministerial approval for acceptance of donations/ contributions for CNSS activities.</li> <li>Develop sustainability strategies for each of the CNSS pillars.</li> </ul>
	Inability to leverage relevant strategic partnerships.	<ul> <li>Define the type/nature of the envisaged agreement or partnership</li> <li>Review the existing agreements to clearly define the expectations of each party.</li> <li>Alignment of the MoA and the CNSS Strategic Business Plan.</li> </ul>
To establish and promote a strong safety culture within the organisation.	Inadequate implementation of safety culture programme.	<ul> <li>Develop a Safety Culture Improvement Plan to address the IAEA mission findings (from IAEA Expert Mission)</li> <li>Implementation of Safety Culture Improvement Plan</li> <li>NOTES</li> <li>A team has been identified and will review the IAEA findings, revise Safety Culture Self-Assessment Report and develop an action plan in Q1 of 2020/21.</li> </ul>
To provide an independent analytical verification capability and capacity.	Inability to perform independent verification (LAB).	<ul> <li>Validation and verification of methods and procedures per the approved action plan to obtain SANAS accreditation.</li> </ul>
To implement an organisational culture project.	Lack of support for initiatives to improve corporate image and reputation (financial and people).	<ul> <li>Approved plan for all initiatives; culture implementation plan, internal and external communication plans.</li> <li>Budget to support planned initiatives.</li> <li>Management support and commitment.</li> <li>Consequence management.</li> </ul>

OUTCOMES	KEY RISKS	RISK MITIGATION
To implement regulatory programmes to ensure effective nuclear and radiation safety regulation	Undue pressure to finalise informed regulatory decision for LTO.	<ul> <li>Develop the NNR project plan for LTO.</li> <li>Early engagement with Eskom and regular pre-licensing engagements.</li> <li>High-level intervention with Eskom top management.</li> <li>Request safety case specification from Eskom.</li> <li>Collate information from bilateral partners in preparation for review.</li> <li>Develop a TAG.</li> </ul>
To build security management capacity.	Inadequate facilities and infrastructure.	<ul> <li>Explore options available to optimally address growth of staff and implement approved solutions.</li> <li>Develop a facility management roadmap and plan.</li> <li>Integrate immovable asset management and facility management.</li> <li>Develop corporate identity for NNR facilities</li> </ul>
To implement ICT strategic deliverables	Leaking of information	<ul> <li>Implementation of the IRM project.</li> <li>Implementation of the data leakage prevention project.</li> </ul>
To develop mechanisms that ensure financial viability and sustainability of the organisation.	Inability to sustain the NNR financially	<ul> <li>Finalise and implementation of the Funding model</li> <li>Development of a Financial Sustainability risk analysis report.</li> </ul>
	Decline in revenue	<ul> <li>Binding conditions of authorisations to be included in the licence, which will ensure that NNR will be paid if the company liquidates, going on business rescue.</li> <li>Draft categorisation of NORM authorisation holders document to be finalised and implemented.</li> <li>Finalise the financial sustainability model for the NNR and implement the approved initiatives.</li> </ul>

OUTCOMES	KEY RISKS		<b>RISK MITIGATION</b>
To reverse the observed trend	Inability to verify radon level	•	Implement relevant
of degradation of safety and	heldors		recommendations of the desktop
facilities.	noideis.		instrumentation.
		•	Schedule monitoring activities in the
			CAP, as applicable.

Table 9: Key Risks and Mitigations.

#### 7. PUBLIC ENTITIES

NAME OF PUBLIC ENTITIES	MANDATE	OUTCOMES
Not applicable	Not applicable	Not applicable

Table 10: Public Entities.

#### 8. INFRASTRUCTURE PROJECTS

NO	PROJECT NAME	PRO- GRAMME	DESCRIP- TION	OUTPUTS	START DATE	COMPLE- TION DATE	TOTAL ESTIMATED COST	CURRENT YEAR EX- PENDITURE
1.	Cape Town Office Con- struction Project.	Finance	Construc- tion of office building to accommo- date NNR employees in Cape Town.	NNR Cape Town office space/ building.	November 2014	December 2021	R56m ac- cording to the project plan, how- ever the Board have approved R47m.	R97835.18 for the cur- rent year and R4.2m since in- ception for profession- al services.

Table 11: Infrastructure Projects.

The National Nuclear Regulator does not have any long-term infrastructure capital plans.

#### 9. PUBLIC-PRIVATE PARTNERSHIPS

PPP NAME	PURPOSE	OUTPUTS	CURRENT VALUE OF AGREEMENT	END-DATE OF AGREEMENT
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Table 12: Public-Private Partnerships.

# Part D:

TECHNICAL INDICATOR DESCRIPTION

#### 1. TECHNICAL INDICATOR DESCRIPTION

Outcome	To provide an independent radio- analytical verification capability and capacity.
Indicator Title	RM1: SANAS Accreditation application form
Definition	Implementation of planned activities to be able to attain SANAS accreditation on identified methods i.e. Gamma Spectrometry Method: NORM Soil & Sediments.
Source/Collection of Data	Laboratory quality manual
	Laboratory procedures
	Schedule of accreditation
	SANAS application form
Method of Calculation	A calculated percentage of activities as per the plan: i.e.
	$\frac{Actual Performance for year to date}{target for year to date} * 100\% = Quarter Achievement.$
	The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	Approved accreditation plan
	Milestone reports for the plan
	SANAS accreditation documents
Assumptions	Availability of human and financial resources
	Availability of tools and equipment
	Co-operation from SANAS
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Quarterly
Desired Performance	SANAS accreditation preparation
Indicator Responsibility	Divisional Executive: RITS

Outcome	To establish and promote a strong safety culture.
Indicator Title	RM2: % of implemented activities as per the Safety Culture Improve- ment Plan
Definition	Implementation of the Safety Culture programme to promote and improve a strong safety and security culture for the NNR.
Source/Collection of Data	IAEA Safety Report Series on Self-Assessment of Safety Culture
	NNR Safety Culture Self-Assessment Report
	IAEA Expert Mission Safety Culture Report
	Safety Culture Improvement Plan
	Safety and Security Culture Policy
Method of Calculation	A calculated percentage of activities as per the plan: i.e.
	$\frac{Actual Performance for year to date}{target for year to date} * 100\% = Quarter Achievement.$
	The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	Safety Culture Improvement Plan
	Safety Culture Improvement Report
	Revised Safety and Security Culture Policy
	Milestone Quarterly reports
Assumptions	Availability of human and financial resources
	Personal accountability of NNR staff towards safety
	Leadership commitment towards safety
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Quarterly
Desired Performance	Improvement in the Safety Culture Plan of the Regulator
Indicator Responsibility	Divisional Executive: RITS

Outcome	To implement regulatory programmes to assure effective nuclear and radiation safety regulation.
Indicator Title	RM3a: % implementation of the CAP
Definition	Implementation of the Compliance Assurance Plan (CAP) through carrying out compliance assurance activities.
Source/Collection of Data	<ul> <li>Compliance Assurance Plan</li> <li>Previous performance reports</li> </ul>
Method of Calculation	A calculated percentage of activities as per the plan: i.e. <u>Actual Performance for year to date</u> * 100% = Quarter Achievement. <u>target for year to date</u> * 100% = Chievement. The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	<ul> <li>Inspection reports</li> <li>Letter to holder of nuclear authorisation or applicant, informing of inspection outcomes</li> <li>Enforcement directives/letters where applicable</li> </ul>
Assumptions	<ul> <li>Availability of NNR human and financial resources</li> <li>Availability of operator personnel</li> <li>Availability of tools and equipment</li> <li>NNR allowed unfettered access to sites</li> </ul>
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where appli- cable)	N/A
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	100% of planned inspections conducted and outcomes communi- cated to holder of nuclear authorisation or applicant
Indicator Responsibility	Divisional Executive: NTN Divisional Executive: NPP

Outcome	To implement regulatory programmes to assure effective nuclear and radiation safety regulation.
Indicator Title	RM3b: % of planned reviews and assessments undertaken
Definition	Reviews and assessments undertaken for effective nuclear and radiation safety regulation.
Source/Collection of Data	Authorisation holder documentation/ submissions
Method of Calculation	A calculated percentage of activities as per the plan: i.e. <u>Actual Performance for year to date</u> * 100% = Quarter Achievement. <u>target for year to date</u> * 100% = Chievement. The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	<ul> <li>Letter to holder of nuclear authorisation or applicant, informing of review outcomes</li> <li>Quarterly Review Plan</li> </ul>
Assumptions	<ul> <li>Holders of nuclear authorisations and applicants submit safety assessments as per agreed schedule</li> <li>Applicant has paid the prescribed fee to the NNR</li> <li>The NNR has sufficient resources to undertake reviews in- house or TSO is available to assist with the reviews</li> </ul>
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where appli- cable)	N/A
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	100% of planned reviews and assessments undertaken and re- sponses submitted to authorisation holders
Indicator Responsibility	Divisional Executive: NTN Divisional Executive: NPP

Outcome	To implement regulatory programmes to assure effective nuclear and radiation safety regulation.
Indicator Title	RM3c: No. of NORM conditions of authorisations reviewed
Definition	Reviewing of the conditions of authorisations for 3 categories of NORM.
Source/Collection of Data	<ul> <li>Request for updated safety assessments from nuclear authorisation holders.</li> <li>Incoming submissions, priority lists, agreed schedule between the NNR and authorisation holders.</li> </ul>
Method of Calculation	A calculated percentage of activities as per the plan: i.e. <u>Actual Performance for year to date</u> * 100% = Quarter Achievement. <u>target for year to date</u> * 100% = Chievement. The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	<ul> <li>Database of all conditions of authorisations reviewed and revised categories for NORM</li> <li>Quarterly plan</li> </ul>
Assumptions	<ul> <li>The staff complement does not decrease</li> <li>There are funds to review the number of NORM conditions of authorisations</li> </ul>
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where appli- cable)	N/A
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	3 conditions of authorisation for NORM categories reviewed
Indicator Responsibility	Divisional Executive: NTN

Outcome	To implement regulatory programmes to assure effective nuclear and radiation safety regulation.
Indicator Title	RM3d: Conduct benchmark study on Regulatory Framework for Radon in Dwellings.
Definition	Conduct a benchmark study on regulatory framework for control of radon in dwellings with other countries.
Source/Collection of Data	Regulatory documents of established regulators
Method of Calculation	A calculated percentage of activities as per the plan: i.e. $\frac{Actual Performance for year to date}{target for year to date} * 100\% = Quarter Achievement.$ The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	<ul> <li>Benchmark report</li> <li>Meetings with counterparts</li> </ul>
Assumptions	<ul> <li>Readily available information on regulatory framework from other countries</li> <li>Use of bilateral partners to access information related to control of radon</li> </ul>
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where appli- cable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Annually
Desired Performance	Benchmark report on Regulatory Framework for Radon in Dwell- ings.
Indicator Responsibility	Divisional Executive: NTN

Outcome	To strengthen Regulatory Framework: Long-Term Operation.
Indicator Title	RM4: Approved resource plan for LTO
Definition	A resource plan for Long-Term Operations at Koeberg.
Source/Collection of Data	NNR Staffing Plan
	Project planning data
	Safety Analysis Report for LTO
	Licence schedule from authorisation holder
Method of Calculation	A calculated percentage of activities as per the plan: i.e.
	Actual Performance
	Quartely Target*100%=Quarter Achievement
	. The formula is also applicable for calculation of annual target.
Means of Verification (PoE)	Approved resource plan
Assumptions	Received licensing strategy for LTO
	Acquisition of adequate resources
	Approval by the Board
	Clearly defined regulatory framework
Disaggregation of Beneficiaries	N/A
applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Annually
Desired Performance	Approved resource plan for LTO
Indicator Responsibility	Divisional Executive: NPP

Outcome	To ensure the long-term sustainability of the CNSS.
Indicator Title	RM5: Approved Integrated CNSS Sustainability Plan
Definition	A plan outlining the sustainability plans for 4 pillars of the CNSS.
Source/Collection of Data	CNSS strategy
	CNSS business plan
Method of Calculation	Milestone achievement in relation to plan.
Means of Verification (PoE)	Approved Integrated CNSS Sustainability Plan
Assumptions	Availability of staff
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Annually
Desired Performance	Approved Integrated CNSS sustainability Plan
Indicator Responsibility	Director: CNSS

Outcome	To develop and maintain mechanisms to ensure financial viability and sustainability of the organisation.
Indicator Title	FM1a: 100% implementation of the gazetted government notice
Definition	Implementation of the gazetted government notice relating to charging interest on overdue accounts.
Source/Collection of Data	<ul> <li>Gazetted government notice</li> <li>Debtors ageing report</li> </ul>
Method of Calculation	Milestone achievement in relation to plan
Means of Verification (PoE)	Financial report on interest charged
Assumptions	Availability of finance staff to execute the task
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Quarterly
Desired Performance	Projected revenue report on overdue accounts
Indicator Responsibility	Chief Financial Officer

Outcome	To develop and maintain mechanisms to ensure financial viability and sustainability of the organisation.
Indicator Title	FM1b: 100% implementation of the pilot plan
Definition	Operationalisation and sustainability of the CNSS through the provision of the fee structure.
Source/Collection of Data	<ul><li>Contracts/agreements</li><li>Invoices</li></ul>
Method of Calculation	Milestone achievement in relation to plan or schedule.
Means of Verification (PoE)	Pilot plan report
Assumptions	Availability of staff to execute the task both at CNSS and finance.
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Quarterly
Desired Performance	A report with the pilot plan outcomes
Indicator Responsibility	Chief Financial Officer

Outcome	To accelerate equity in procurement.
Indicator Title	FM2: 50% of procurement spend on designated groups in terms of the PPPFA
Definition	This is the percentage of procurement spend against total procurement value of planned projects. Procurement opportunities targeted for designated groups as per new
	amendments to the Preferential Procurement Regulations.
Source/Collection of Data	Procurement records
	Bid documents
Method of Calculation	Milestone achievement in relation to plan or schedule.
Means of Verification (PoE)	SCM report
	Bid award results
Assumptions	Availability of staff to execute the task both at finance and re-
	sponse by prospective suppliers or service providers from the designated groups as the NNR invite bids.
Disaggregation of Beneficiaries (where applicable)	<ul> <li>Designated groups in terms of the PPPFA</li> </ul>
Spatial Transformation (where applicable)	N/A
Calculation Type	Non-cumulative
Reporting Cycle	Quarterly
Desired Performance	50% of procurement spent on designated groups in terms of the PPPFA.
Indicator Responsibility	Chief Financial Officer

Outcome	To implement the ICT strategic deliverables.
Indicator Title	PM1: 100% implementation of the approved strategic deliverables
Definition	Implementation of the approved information communication and tech- nology strategic deliverables.
Source/Collection of Data	ICT Strategy
	• ICT Plan 2020-21
Method of Calculation	Milestone achievement in relation to plan or schedule.
Means of Verification (PoE)	ICT Strategy
	ICT plan for the year
	Quarterly and bi-annual reports
	ICT/BCP Committee minutes
Assumptions	Availability of financial resources for planned deliverables
	SCM processes initiated and completed timeously
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	100% implemented approved ICT strategic deliverables
Indicator Responsibility	Divisional Executive: CSS

Outcome	To develop and implement an integrated strategy to enhance corporate image and reputation of the NNR.
Indicator Title	LM1: 100% implementation of the integrated strategy.
Definition	Implementation of the approved integrated strategy aimed at enhancing the corporate Image and reputation of the NNR.
Source/Collection of Data	Approved plan
	<ul> <li>Integrated strategy on NNR culture and corporate image</li> </ul>
Method of Calculation	Milestone achievement in relation to plan or schedule
Means of Verification (PoE)	Approved annual plan
	Quarterly reports
Assumptions	Availability of financial resources for the plan
Disaggregation of Beneficiaries (where applicable)	N/A
Spatial Transformation (where applicable)	N/A
Calculation Type	Cumulative
Reporting Cycle	Quarterly
Desired Performance	Corporate image enhancement and high reputation for the NNR
Indicator Responsibility	Divisional Executive: CSS

#### ANNEXURE A: DETAILED RISK REGISTER

NATIONAL NUCLEAR REGULATOR TYPE OF ASSESSMENT: STRATEGIC RISK ASSESSMENT FINANCIAL YEAR: 2020/21 DATE OF ASSESSMENT:04 DECEMBER 2019

#			STRATEGIC OBJECTIVE RISK DESCRIPTION RISK CATEGORY ROOT CAUSE(S) (CONTRIBUTING FACTOR) DESCRIPTION		RISK ANALYSIS		INHERENT	~	INHERENT	-	
	STRATEGIC GOAL	STRATEGIC OBJECTIVE			CONSEQUENCE(S) DESCRIPTION	IMPACT RATING	ALUE	LIKELIHOOD RATING	ALUE		
1	To opera- tionalise the CNSS	To ensure the long term sustainability of the CNSS (including its transition from incubation, funding and strategy for each of its pillars).	Failure to sustain CNSS programmes in the long-term	Compliance/ Regulatory	<ol> <li>Inability to fulfil mandate/achieve objectives.</li> <li>Inability to attract suitable funders.</li> <li>CNSS being redun- dant.</li> <li>Financial loss.</li> <li>Reputational damage.</li> <li>Interruptions of business operations.</li> </ol>	Critical	5	Common	5		
2			Inability to leverage rele- vant strategic partnership <b>Description</b> : CNSS might not be able to attract appropriate partnerships to execute its mandate	Compliance/ Regulatory	1) Inadequate partnership agreements (i.e. obligations for both parties un- clearly defined). 2) Lack of involvement of all partners/ stakeholders in decision-making process.	<ol> <li>Ineffective partner- ships/collaboration.</li> <li>Reputational dam- age of either party.</li> <li>Breach of terms and conditions of the part- nership agreement/s.</li> <li>Lack of return on investment.</li> <li>Existing partners may pull out/potential partners may not want to collaborate.</li> </ol>	Critical	5	Common	5	

INHERENT RISK	CURRENT/ EXISTING CONTROLS	CONTROL ADEQUACY	CONTROL EFFECTIVENESS	RESIDUAL IMPACT RATING	VALUE	RESIDUAL LIKELIHOOD	VALUE	RESIDUAL RISK RATING	ACTIONS PLANS	ACTION OWNER	ACTION START DATE	DUE DATE	RISK OWNER
25	1) Current allocated NNR budget.	Inadequate	Ineffective	Critical	5	Common	5	25	1) Obtain ministerial approval for acceptance of donations/ contributions for CNSS activities. 2) Develop sustainability strategies for each of the CNSS pillars.	Dr M. Mkhosi ( Director: CNSS)	1-Apr- 2020	30- Jun- 2020	Ms. L. Mpete (Divisional Executive: RITS)
25	1) MoAs in place. 2) CNSS Stra- tegic Business Plan.	Partially adequate	Partially effective	Critical	5	Likely	4	20	1) Define the type/ nature of the envisaged agreement or partnership. 2) Review the existing agreements to clearly define the ex- pectations of each party. 3) Alignment of the MoA and the CNSS Strategic Business Plan.	Dr M. Mkhosi ( Director: CNSS)	1-Apr- 2020	30- Jun- 2020	Ms. L. Mpete (Divisional Executive: RITS)

#				1	RISK ANALYSIS						
	STRATEGIC GOAL	STRATEGIC OBJECTIVE	RISK DESCRIPTION	RISK CATEGORY	ROOT CAUSE(S) (CONTRIBUTING FACTOR)	CONSEQUENCE(S) DESCRIPTION	IMPACT RATING	VALUE	LIKELIHOOD	ALUE	
3	To provide efficient and effective nuclear regulatory services	To establish and promote a strong safety culture within the organisa- tion.	Inadequate implementation of safety culture programme	Regula- tory Improve- ments & Technical Services	<ol> <li>Personal accountability/ responsibility towards safety not consistent- ly practiced throughout the organisation.</li> <li>Leadership commitment on safety is inconsistently demonstrated in the organisation.</li> <li>Integration or collaboration on NNR's activities or processes not practiced through the organisation.</li> <li>Competing priorities result- ing in resource constraints to promote safety culture.</li> </ol>	<ol> <li>Reputational damage to the NNR from our licence holders and the general public.</li> <li>There may be lack of trust within the NNR.</li> <li>Lack of harmony in nuclear facility regulation.</li> <li>Possible missed learning opportunities due to lack of co-oper- ation within NNR.</li> </ol>	Critical	5	Common	5	
4		To provide an independent analytical verification capability and capacity.	Inability to perform in- dependent veri- fication (LAB)	Compliance/ Regulatory	<ol> <li>NNR laboratory not fully opera- tional.</li> <li>Lack of accredi- tation for labora- tory methods.</li> </ol>	<ol> <li>NNR utilises the services of a license holder (NECSA) to analyse samples.</li> <li>Delays in obtaining results to make timely regulatory decisions.</li> <li>Members of public potentially exposed to radiation.</li> <li>Negative reputation.</li> </ol>	Critical	5	Likely	4	

INHERENT RISK	CURRENT/ EXISTING CONTROLS	CONTROL ADEQUACY	CONTROL EFFECTIVENESS	RESIDUAL IMPACT RATING	VALUE	RESIDUAL LIKELIHOOD	VALUE	RESIDUAL RISK RATING	ACTIONS PLANS	ACTION OWNER	ACTION START DATE	DUE DATE	RISK OWNER
25	<ol> <li>Established safety and security cul- ture working group.</li> <li>Approved Safety and Se- curity Culture Policy.</li> <li>Safety culture aware- ness sessions with NNR safety culture self-assess- ment.</li> <li>Conducted IAEA Safety Culture Mis- sion to review NNR safety culture.</li> </ol>	Partially adequate	Partially effective	Major	4	Likely	4	16	1) Develop a Safety Cul- ture Improve- ment Plan to address the IAEA mission findings (from IAEA Expert Mis- sion). 2) Imple- mentation of Safety Culture Improvement Plan. <b>Notes</b> 1) A team has been identi- fied and will review the IAEA findings, revise Safety Culture Self-Assess- ment Report an develop an action plan in Q1 of 2020/21.	Ms. B. Mbebe (Manager: RSP)	1-Apr- 2020	30- Jun- 2020	Ms. L. Mpete (Divisional Executive: RITS)
20	<ol> <li>Verification         <ol> <li>sconducted                 at other labo- ratories.</li> <li>NNR lab is                 fully equipped                 and opera- tional.</li> <li>About 60%                 of verification                 plan being                 analysed at                 the lab.</li> <li>70% of                 methods                 validated                 5) Procedure                 for collection                       of samples de                       validated                       5) Procedure                      for collection</li></ol></li></ol>	Partially adequate	Partially effective	Major	4	Moderate	4	16	1) Valida- tion and verification of methods and procedures per the approved action plan to obtain SANAS accreditation.	Ms. N. Mohlala (Manager: LAB)	1-Apr- 2020	30- Jun- 2020	Ms. L. Mpete (Divisional Executive: RITS)

#				l	RISK ANALYSIS		INHER <u>ENT</u>		< INHERENT		
	STRATEGIC GOAL	STRATEGIC OBJECTIVE	RISK DESCRIPTION	RISK CATEGORY	ROOT CAUSE(S) (CONTRIBUTING FACTOR)	CONSEQUENCE(S) DESCRIPTION	IMPACT RATING	/ALUE	LIKELIHOOD RATING	/ALUE	
5	To optimise strategic people manage- ment practices.	To implement an organisa- tional culture project.	Lack of support for initiatives to improve cor- porate image and reputation (financial and people).	Reputational	1) Lack of leader- ship commitment and financial resources for identified initia- tives.	<ol> <li>Poor organisational culture.</li> <li>Reputational harm.</li> </ol>	Critical	5	Common	5	
6	To provide efficient and effective nuclear regulatory services.	To implement regulatory programmes to assure effective nuclear and radiation safety regulation.	Undue pressure to finalise informed regu- latory decision for LTOs	Compliance/ Regulatory	<ol> <li>Failure by Eskom to submit the safety case on time.</li> <li>Delays in promulgating regulations for LTO.</li> <li>Regulations for LTO not promul- gated</li> </ol>	<ol> <li>Delays in finalising the regulatory deci- sions on LTO.</li> <li>Reputational damage.</li> <li>Inability to review the safety case within the time given.</li> <li>Extended shut down of Koeberg.</li> <li>Failure by Eskom to meet regulatory requirements for the KNPP LTO.</li> </ol>	Critical	5	Common	5	
7	To ensure financial vi- ability and sustainabil- ity of the organisa- tion.	To build securi- ty management capacity.	Inadequate facilities and infrastructure	Infrastruc- ture	<ol> <li>Growth of the organisation.</li> <li>Approach to facilities and lack of understanding of how facilities contribute to the organisation.</li> <li>Lack of a stra- tegic approach to acquisition and management of facilities.</li> </ol>	<ol> <li>Inadequate facil- ities.</li> <li>Health and safety of employees may be compromised.</li> <li>High maintenance costs associated with poor facilities.</li> <li>Lack of a corporate identity in relation to facilities.</li> </ol>	Moderate	4	Common	5	

INHERENT RISK	CURRENT/ EXISTING CONTROLS	CONTROL ADEQUACY	CONTROL EFFECTIVENESS	RESIDUAL IMPACT RATING	VALUE	RESIDUAL LIKELIHOOD	VALUE	RESIDUAL RISK RATING	ACTIONS PLANS	ACTION OWNER	ACTION START DATE	DUE DATE	RISK OWNER
25	1) Corporate values. 2) Employee relations framework. 3) Internal and external. communica- tion plans.	Partially adequate	Partially effective	Major	4	Likely	4	16	1) Approved plan for all initiatives- Culture Im- plementation Plan, internal and external communica- tion plans. 2) Budget to support planned initiatives. 3) Manage- ment support and commit- ment. 4) Conse- quence management.	Ms. A. Simon (Divisional Executive: CSS)	1-Apr- 2020	30- Jun- 2020	Ms. A. Simon (Divisional Executive: CSS)
25	<ol> <li>Timelines stipulated on the existing regulatory framework.</li> <li>Quarter- ly project meetings with Eskom to track progress.</li> <li>RG 0027 on ageing man- agement and LTO issued.</li> <li>RG-0028 on Periodic Safety Review issued.</li> <li>Sn spection programme being imple- mented.</li> </ol>	Partially adequate	Partially effective	Critical	5	Moderate	3	15	1. Develop the NNR project plan for LTO's. 2. Early engagement with Eskom and regular pre-licensing engage- ments. 3. High-level intervention with Eskom top manage- ment. 4. Request Safety Case Specification from Eskom. 5. Collate information from bilateral partners in preparation for review. 6. Develop a TAG.	Mr. O. Phillips (Divisional Executive: NPP)	1-Apr- 2020	30- Jun- 2020	Mr. O. Phillips (Divisional Executive: NPP)
20	<ol> <li>Facilities management maintenance plan.</li> <li>OHS policy and struc- tures.</li> <li>Asset Management Process.</li> <li>Contracts and SLAs related to facilities management including security ser- vices.</li> </ol>	Partially adequate	Partially effective	Moder- ate	3	Likely	4	12	1) Explore options available to optimally ad- dress growth of staff and implement approved solutions. 2) Develop a facility management a) Integrate immov- able asset management. 4) Develop corporate identity for NNR facilities.	Mr. K. Mo- disane (Manager: Security and Facilities)	01-Apr- 2020	30- Jun- 2020	Ms. A. Simon (Divisional Executive: CSS)

#					RISK ANALYSIS		INHERENT		INHERENT		
	STRATEGIC GOAL	STRATEGIC OBJECTIVE	RISK DESCRIPTION	RISK CATEGORY	ROOT CAUSE(S) (CONTRIBUTING FACTOR)	CONSEQUENCE(S) DESCRIPTION	IMPACT RATING	/ALUE	LIKELIHOOD RATING	/ALUE	
8	To provide robust internal business processes.	ICT strategic deliverables s.		1) Non-com- pliance with secu- rity and informa- tion management principles and processes.	<ol> <li>Disclosure of regulated information.</li> <li>Reputational harm.</li> <li>Litigation</li> </ol>	Critical	5	Likely	3		
9	To ensure financial vi- ability and sustainabil- ity of the organisa- tion.	To develop mechanisms that ensure fi- nancial viability and sustain- ability of the organisation.	Inability to sustain the NNR financially	Financial	<ol> <li>Late payment of authorisation fees by authorisa- tion holders.</li> <li>Late approval and getting of authorisation fees.</li> </ol>	<ol> <li>Inability to fund regulatory activities.</li> <li>Strategic projects held back.</li> </ol>	Major	5	Moderate	3	
10			Decline in revenue	Financial	<ol> <li>Adverse economic conditions.</li> <li>Business rescue and liquidation of some authorisation holders.</li> <li>Unclear process for allocation of categories resulting in holders requesting to be placed in a lower category and therefore pay lower authorisation fees.</li> <li>Some holders not paying au- thorisation fees on time.</li> </ol>	1) Financial obligations and mandate not met.	Moderate	4	Likely	4	

INHERENT RISK	CURRENT/ EXISTING CONTROLS	CONTROL ADEQUACY	CONTROL EFFECTIVENESS	RESIDUAL IMPACT RATING	VALUE	RESIDUAL LIKELIHOOD	VALUE	RESIDUAL RISK RATING	ACTIONS PLANS	ACTION OWNER	ACTION START DATE	DUE DATE	RISK OWNER
15	<ol> <li>Informa- tion Rights Management (IRM) policy and systems in place.</li> <li>Encryption of data.</li> </ol>	Partially adequate	Partially effective	Major	4	Moderate	3	12	<ol> <li>Implemen- tation of the IRM project.</li> <li>Implemen- tation of the data leakage prevention project.</li> </ol>	Mr. J. Bolton ( ITC Man- ager)	1-Apr- 2020	30- Jun- 2020	Ms. A. Simon (Divisional Executive: CSS)
15	1) Effective debtors collection process. 2) Budget allocation is approved at EXCO to ensure alignment with strategic imperatives and other regulatory activities.	Partially adequate	Partially effective	Critical	5	Unlikely	2	10	1) Finalise and imple- mentation of the Funding model 2) Devel- opment of a Financial Sustainability risk analysis report.	Mr. D. Netshivhaz- waulu (Divisional Executive: Finance)	1-Apr- 2020	30- Jun- 2020	Mr. D. Net- shivhaz- waulu (Divisional Executive: Finance)
16	<ol> <li>Cost containment measures implemented (Financial Manual).</li> <li>Meetings held with stakeholders, e.g. Eskom.</li> <li>There is a rational basis and process for determin- ing the cate- gorisation of holders taking into account the effort regulate the holder.</li> <li>Payment reminders and debt recovery process in place.</li> </ol>	Partially adequate	Partially effective	Moderate	3	Moderate	3	9	<ol> <li>Binding conditions of authori- sations to be included in the licence, which will ensure that NNR will be paid if the company liq- uidates, going on business rescue.</li> <li>Draft categorisa- tion of NORM authorisation holders doc- ument to be finalised and implement- ed.</li> <li>Finalise the financial sustainability model for the NNR and implement the approved initiatives.</li> </ol>	1) Ms. D Kgomo (Divisional Executive: NTN) 2) Mr. Dakalo Netshivhaz- waulu (Divisional Executive: Finance)	1-Apr- 2020	30- Jun- 2020	Mr. D. Net- shivhaz- waulu (Divisional Executive: Finance)

#					RISK ANALYSIS	INHERENT	< .	INHERENT	_		
	STRATEGIC GOAL	STRATEGIC OBJECTIVE	RISK DESCRIPTION	RISK CATEGORY	ROOT CAUSE(S) (CONTRIBUTING FACTOR)	CONSEQUENCE(S) DESCRIPTION	IMPACT RATING	ALUE	LIKELIHOOD	ALUE	
11	To provide efficient and effective nuclear regulatory services.	To reverse the observed trend of degradation of safety and security culture at authorised facilities.	Inability to verify radon level measure- ments of the authorisation holders.	Health and Safety	1) Unavailability of a regulatory radon measure- ment verification programme.	1) Authorisation holders may submit inaccurate informa- tion relating to radon measurements in high risk areas.	Moderate	3	Moderate	4	

Table 13: Detailed Risk Register.

INHERENT RISK	CURRENT/ EXISTING CONTROLS	CONTROL ADEQUACY	CONTROL EFFECTIVENESS	RESIDUAL IMPACT RATING	VALUE	RESIDUAL LIKELIHOOD	VALUE	RESIDUAL RISK RATING	ACTIONS PLANS	ACTION OWNER	ACTION START DATE	DUE DATE	RISK OWNER
12	1) The mines perform monitoring of underground work areas. 2) The NNR reviews dose reports sub- mitted by the mines. 3) Based on the results of the reviews, the NNR can decide to declare the facility as a special case mine, which gets moni- tored more frequently. 4) The NNR biennially reviews and approves the worker safety assessments and the work- er radiation protection programme. 5) During compliance assurance inspections, the authorisa- tion holders demonstrate using the raw data from the service pro- vider (PARC RGM) and other factors (e.g. f-factor, occupancy, dose conver- sation etc.) how the dose is computed and assigned to occupation- ally exposed	Partially adequate	Partially effective	Moderate	3	Moderate	3	9	1) Implement relevant recommen- dations of the desktop study on monitoring instrumenta- tion. 2) Schedule monitoring activities in the CAP, as applicable.	Mr. S. Pheto (Manager Inspector: NORM)	1-Apr- 2020	30- Jun- 2020	Ms. D. Kgomo (Divisional Executive: NTN)
	persons.												



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