	MANUAL	TRANSMISSION
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1. Introduction

Eskom Holding SOC Limited management through its SHEQ policy has committed to implementation of Environmental Management System (EMS) in accordance with ISO 14001 standard to drive the entire organisation to environmental performance enhancement, fulfilment of compliance obligation and achieving environmental objectives.

Transmission as a division within Eskom Holdings SOC Limited, its leadership is committed in establishing, implementing, maintaining and continually improving Transmission Environmental Management System (EMS).

This manual describes the core elements and the intended outcomes of the Environmental Management System (EMS) for Transmission processes. It defines the methods, resources, and personnel structure necessary to establish, implement, maintain, and continually improve the EMS.

2. Supporting Clauses

2.1 Scope

2.1.1 Purpose

The purpose of this EMS Manual is to define the context and the scope of Transmission Environmental Management System (EMS). The manual also provides a linkage of system documents to the various elements of the ISO 14001:2015 standard.

2.1.2 Applicability

This document shall be applicable to Transmission division for the implementation, maintenance, and continual improvement of the EMS.

2.1.3 Effective date

This document shall be effective from the authorisation date.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] ISO 14001: 2015 Environmental Management Systems – Requirements with guidance for use
- [2] 32-727: SHEQ Policy
- [3] 240-105049062: Transmission Business Management System Manual
- [4] 240 – 78305014: Environmental Aspects and Management Programme/Plans requirements
- [5] 32-6: Document and record management

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- [6] 240-912140073: SHE Compliance Obligations/Legal and Other requirements and Evaluation of Compliance Procedure
- [7] 32-477: Safety, Health and Environment Training and Development procedure
- [8] 240-44175038: Control of Non-conforming product or service procedure
- [9] 240-53464409: Corrective and Preventive Action Procedure
- [10] 32-123: Emergency Planning
- [11] 240-80662342: Monitoring and Measurement Work Instruction
- [12] 240-80650164: Transmission Business Plan
- [13] 240-141783373: Transmission Environmental RACI
- [14] 32-391: Integrated Risk Management Framework and Standard
- [15] 240-84661605: Process Control Manual (PCM) for Manage Business Communication
- [16] 240-53413860: Business Management system audit standard
- [17] 32-172: Procedure for Audit Reporting and Categorisation of Control, Audit Findings and Audit Report Ratings
- [18] 240-53458685: Management system review standard

2.2.2 Informative

- [19] ISO 14001: 2015 Environmental Management Systems – Requirements with guidance for use
- [20] ISO 9001 Quality Management Systems

2.3 Definitions

All definitions used are in line with the ISO 14001:2015 EMS – Requirements with guidance for use.

2.3.1 Document:

Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary)

2.4 Abbreviations

Abbreviation	Explanation
BUER	Business Unit Environmental Representative
BU	Business Unit
EMS	Environmental Management System
GEA	Grid Environmental Advisor
RACI	Responsibility, Accountability, Consultancy or Information
ISO	International Organization for Standardization
SHEQ	Safety, Health, Environment and Quality

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Abbreviation	Explanation
EPP	Emergency Preparedness Plan
KPI	Key Performance Indicator
PCM	Process Control Manual

2.5 Roles and Responsibilities

It is the responsibility of BU managers to ensure that this manual is implemented within their BU's. Environmental management system roles, responsibility and authority are defined, documented and communicated at relevant functions and levels within Transmission. These roles and responsibilities are defined in the Transmission Environmental RACI (240-141783373).

2.6 Process for Monitoring

The performance of Transmission's EMS will be monitored through Management Review meetings, internal assessments and audits as detailed in the monitoring and measurement work instruction (240-80662342)

2.7 Related/Supporting Documents

Not Applicable.

3. Document Content

3.1.1 Context of Transmission

3.1.2 Understanding Transmission and its context

Transmission Division is a division within Eskom Holdings SOC Limited and is an essential link between electricity generation and electricity distribution. The division has an enormous responsibility to balance supply and demand. The transmission of electricity is in accordance with the requirements of the Grid Code and the National Rationalised Specification NRS048.

The mandate given to the Transmission Group by Eskom Holdings SOC Limited is:

“To provide a reliable and efficient transmission network, system operator and energy market services in South Africa and designated electricity markets”

The Transmission Group Business Plan (240-80650164) details the business context of the division and defines the journey map that Transmission will pursue to fulfil its mandate in the attainment of Eskom corporate and environmental strategies (240-82410629). The plan also highlights the initiatives that Transmission pursues to support Eskom's strategic intent in line with Eskom vision, outlining the key strategic drivers, objectives, deliverables, and risks under focus over a specified planning horizon. During this planning process, due consideration is given in determining the internal and external issues that are relevant to the division that will affect its ability to achieve the intended

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outcomes of the Environmental Management System (EMS). These EMS intended outcomes are namely: a) the enhancement of environmental performance, b) the fulfilment of compliance obligations and c) the achievement of environmental objectives. Transmission BUs further document BU specific internal and external issues in respective operational plans.

Intended outcome	Summary of Internal and external issues relevant to Transmission	Monitoring and measurement of intended outcome
1. The enhancement of environmental performance	<ul style="list-style-type: none"> Environmental conditions: biodiversity – bird mortalities, Alien Invasive species management Regulatory requirement – GHG reporting, existing water use registration Management of land, i.e., sink holes and servitude rights/land acquisition International – EMS Structural changes – organizational changes i.e. Eskom re-organisation 	<ul style="list-style-type: none"> Compliance: Legal Contravention Training: awareness training Biodiversity: bird mortalities reported and Wildlife Interaction (index), AIS management Land and property management – registration with FPA's Waste management: Management of SF6 acquisitions, inventory and reporting on SF6 top-up (emissions) and CO2 emissions from Aviation Water management, i.e. domestic, emergency preparedness, stormwater ISO 14001 certification: EMS Confidence Level Indicator
2. The fulfilment of compliance obligations	<ul style="list-style-type: none"> Legal Internal procedures 	<ul style="list-style-type: none"> Compliance framework reporting – breaches register Legal compliance audit Internal assessment and Reviews
3. The achievement of environmental objectives	<ul style="list-style-type: none"> Environmental strategy implementation - 	<ul style="list-style-type: none"> SHEQ (environmental) Policy objectives

Internal and external issues are identified through SWOT analysis (strengths, weaknesses, opportunities and threats) by senior management, BU management teams with environmental representatives. Risks and opportunities are also evaluated (as per Eskom Enterprise Risk Management risk rating methodology) at Transmission and BU level as the internal and external issues can result in risks and opportunities that can affect the intended outcomes of the EMS of the BU and the division. Internal and external issues and Risk and opportunities are integrated and documented in the Transmission business plan and respective BU operational plans.

In determining the EMS context for Transmission due consideration was given to internal and external issues, including environmental conditions documented in a range of environmental sensitivity/biodiversity maps and related information available on Eskom ArcGIS.

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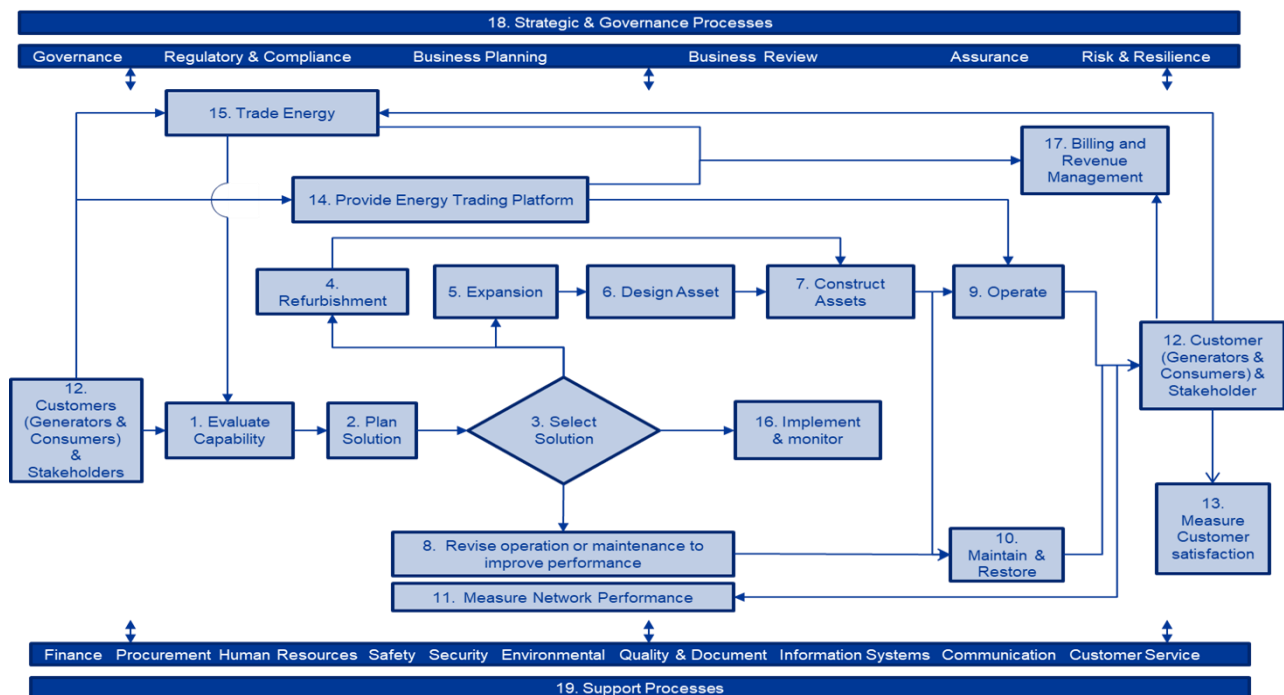
3.1.3 Understanding the needs and expectations of Transmission Interested Parties

Interested parties that are relevant to the Transmission environmental management system have been identified with their needs and expectations determined. Certain needs and expectations (e.g. sourced during the environmental assessment processes); become compliance obligations as these are deemed relevant to Transmission EMS. Interested parties and specific compliance obligations have been documented in the respective BU Environmental Management Plans where these influence specific significant environmental aspects. Interested parties include authorities, regulators, non-governmental organisations, investors, landowners, customers, communities, suppliers and employees.

3.1.4 Transmission EMS Scope

Transmission EMS provides a systematic approach for environmental management throughout the division. The Transmission EMS is applicable to the main processes as described in the Transmission Business Management System Manual, (240-105049062):

Transmission Group's main process is shown in the conceptual diagram below:



The scope in terms of the network physical boundaries is shown in Appendix A. Transmission Environmental Management System

Transmission as a division within Eskom Holdings SOC Limited, its leadership is committed in establishing, implementing, maintaining and continually improving Transmission Environmental Management System (EMS) with its intended outcomes being a) the enhancement of environmental performance, b) the fulfilment of compliance obligations and c) the achievement of environmental objectives.

The EMS of Transmission is designed in a manner which fulfils the requirements of ISO 14001: 2015 International standard. EMS elements and the interrelationship of these requirements are indicated

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in Figure 3. To fulfil these requirements, the following key areas are implemented, i.e. the setting of measurable objectives taking into consideration internal and external issues, the needs and expectations of interested parties, regular site inspections, internal audits/assessments and management reviews.

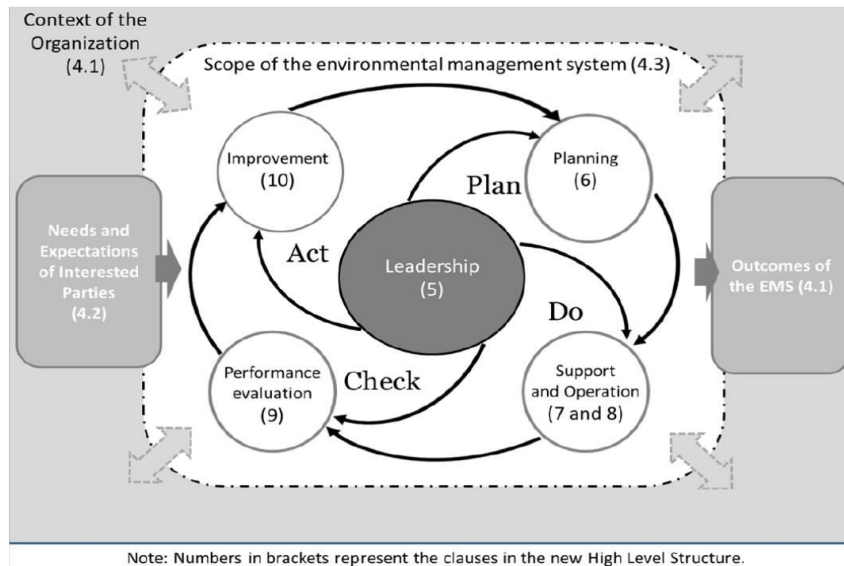


Figure 3: ISO 14001:2015 requirements and PDCA Cycle Relationship

Transmission has established the EMS as documented in this EMS manual and related documentation. The EMS is an Eskom requirement as documented in the Eskom Safety, Health, Environment and Quality Policy (EPL 32-727). The EMS scope of the Transmission is available to interested parties on request.

3.2 Leadership

3.2.1 Leadership and commitment

Transmission leadership demonstrates leadership and commitment through establishment, implementation, maintenance and continually improvement of the EMS within the business areas of their control.

Transmission leadership commitment	Actions to demonstrate leadership
<i>Taking accountability for the effectiveness of the system:</i>	This requirement is demonstrated for example through the reviewing the performance and improvements required at management reviews;
<i>Ensuring that the Policy and environmental objectives are established and compatible with strategic direction and context of the organisation:</i>	The SHEQ Policy is maintained in accordance the business and ISO direction and requirements. This is reviewed during management reviews.

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	Environmental objectives are aligned with the organisation's business objectives i.e Eskom Environmental Strategy Objective, Transmission Priorities and Eskom SHEQ Policy Commitments
<i>Ensuring that the resources needed for the system are available:</i>	Environmental resources, such as staff and budget provisions, are availed. Provisions for mitigation of environmental impacts e.g. wildlife mitigation devices are catered for during design, construction and maintenance activities.
<i>Ensuring the integration of the EMS requirements with organisations business processes:</i>	Environment is integrated into the business processes throughout the process lifecycle including planning, design, assessment, construction, project execution and maintenance of infrastructure as well as supporting processes (e.g. procurement processes): Environment is embedded in the Zero harm value and integrated into governance decision making structures e.g. SHEQ meetings, management and departmental meeting agendas.
<i>Communicating the importance of effective management and of conforming to EMS requirements</i>	At management reviews and departmental meetings environment performance and progress and effectiveness of system implementation are discussed.
<i>Ensuring that the environment achieves its intended outcomes</i>	Reviewed at management reviews and feedback on performance is discussed and reviewed provided at meetings to monitor process of meeting objectives.
<i>Directing and supporting persons to contribute to the effectiveness of the EMS</i>	Through for example the EMS RACI, letters of appointments, inclusion of the environmental KPIs into the Transmission and BU performance score card.
<i>Promoting continual improvement:</i>	Evident during management reviews and business review meetings in terms of reviewing performance and proposing opportunities for improvement where gaps are identified
<i>Supporting other relevant management roles to demonstrate their leadership as it applies to their area of responsibility</i>	Leadership support to relevant management roles is documented in EMS RACI, appointment letters, operational meetings, business review meetings

3.2.2 Environmental Policy

Transmission Division subscribes to Eskom SHEQ Policy (32-727) as an Environmental Policy.

Eskom SHEQ Policy includes a commitment to fulfilling conformance and compliance obligations, setting measurable environmental outcomes/objectives to ensure continual improvement, protection of the environment including prevention of pollution, proactively managing environmental footprint as well as a commitment to open communication in engaging with stakeholders.

The SHEQ Policy is a driving force of Transmission EMS; therefore, it is communicated to personnel through the Eskom Intranet, Eskom Holdings EMS pamphlets/posters, Transmission articles in the newsletter, awareness training events and Business Unit outlook email communications. The SHEQ policy is made available to the interested parties.

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3.2.3 Organisational roles, responsibilities and authorities

(A) Management

Business Unit managers are to appoint environmental management representative(s) with defined roles and responsibilities for the establishment, implementation, maintenance, and improvement of the EMS.

(B) Business Unit Environmental Representative (BUER's)

BUER reports directly to the Business Unit Manager unless otherwise structured and is responsible to support the BU manager in the implementation, auditing, maintenance, and continual improvement of the EMS *in the respective BU*. The roles and responsibilities of the BUERs are defined in appointment letters i.e. reporting on the performance of EMS.

(C) Transmission Employees shall be made aware of:

- Their roles and responsibilities in achieving conformance to the requirements of the Environmental Management System i.e. SHEQ policy and procedures,
- The significant environmental impacts, actual or potential arising out of their work activities and the environmental benefits of improved performance.

Transmission Environmental RACI (240-141783373) describes various roles and responsibilities required for EMS implementation and maintenance.

3.3 Planning

3.3.1 Risk and opportunities

The effective management of risk and resilience is essential for Eskom as an organisation; it is therefore an important element of the business planning process for Transmission. The management of all types of risks that is consistently applied across all BU's is documented in the Integrated Risk Management Framework and Standard (32-391). The risk and opportunities for Transmission are incorporated in the Transmission business plan.

Business unit management with environmental management representatives must identify the factors: internal and external issues, environmental conditions, compliance obligations, emergency situations, significant environmental aspects that can result in risks and opportunities.

The risks and will be rated using the risk management methodology process (integrating with the business process used as per Integrated Risk Management standard 32-391) to determine the likelihood, consequence and overall risk rating. Objectives and actions are then developed to address the risks and opportunities. These factors, risks and opportunities are documented in the BU Risk /Opportunity Registers. The identified risks and opportunities are then integrated in the BU operational plans and Transmission business plan where applicable.

3.3.2 Environmental Aspects

To maintain EMS Transmission has established and implemented a work instruction (240 – 78305014), to determine the environmental aspects which have or can have a significant impact on the environment. In determining aspects that it can control and those that it can influence, Transmission takes into account life cycle perspective, for planned, unplanned, new and modified

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activities, products and services, abnormal conditions and emergency situations. Since the applicable life cycle stages vary depending on respective BU activity and service provision, each BU determine environmental aspects individually within the Transmission EMS scope. The identification of significant environmental aspects is the foundation for identifying risk and opportunities, and establishing meaningful objectives and targets that are measured as indicators of environmental performance.

All BU's are required to develop and maintain an aspect register. The aspect register shall be reviewed by the BUER in consultation with BU management and relevant identified personnel at least once annually or when there is a new or changed process or activity at the facility. The Environmental Management Representative shall maintain minutes and other records for the review process.

3.3.2.1 Compliance Obligations

Transmission is guided by a procedure (240 - 91214073) to identify and specify access to legal and other requirements to which it subscribes. The EMS legal requirements include all the legal obligations i.e. national, provincial, and local laws and regulations; environmental permits; registrations and orders required for the Division and BU's respectively to manage its operations. The other requirements include endorsed international treaties/agreements, internal organizational procedures, work instructions, directives, manuals, and policy decisions.

3.3.2.2 Planning actions

Transmission action plans address its:

Significant environmental aspects: This is documented in the BU action/management plans to address their significant aspects

Compliance obligations: This is documented in the aspect registers and BU action management plans (EMPs). If any significant compliance obligations have been identified, these would be included in the Interested Parties register for specific needs/expectations.

Risks and opportunities: Action plans to address environmental risks and opportunities have been documented in the BU Risk and Opportunities risk registers.

Objectives and plans are monitored and included in the environmental key performance indicators. Risks and opportunities are integrated into the BU planning process.

Refer to 3.7.1 (Monitoring, measurement, analysis, and evaluation) in terms of evaluating the effectiveness of these actions.

3.3.3 Environmental Objectives and planning actions to achieve them

3.3.3.1 Environmental Objectives and Planning actions

Transmission shall establish, implement maintain and document environmental objectives and targets actions at relevant functions and level within the organisation as per Environmental Aspects and Management Programme/Plans requirements document (240-78305014). These should be practicable and consistent with the SHEQ Policy, including the commitments to prevention of pollution, to compliance with applicable legal and other requirements to which the organisation subscribes, and for continual improvement. Programmes shall be established, implemented

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maintained and documented to achieve objectives & measurable targets through assigned responsibilities with means and timeframes. The extent to which environmental objectives has been achieved is tracked quarterly on the Environmental KPI report (Transmission Environmental objectives template 240-108789648); progress monitored at management meetings and discussed at the Management review meetings.

3.4 Environmental Management System Support

3.4.1 Resources

Business Unit management apart from their functional responsibilities they are responsible as outlined in the (Transmission Environmental RACI, 240-141783373) to ensure that the EMS for the business units is established, implemented, maintained and continually improved. This can be achieved by providing adequate manpower, training, technological, and financial resources.

3.4.2 Competence and awareness

Transmission management shall ensure that any person doing work under its control that affects its environmental performance and ability to fulfil its compliance obligation are competent being guided by the job specifications i.e. appropriate education, training and experience. Transmission follows the 32-477: Safety, Health and Environment Training and Development procedure to train employees at each relevant function and level.

Transmission has identified training needs of all employees in relation to its environmental management system and is documented on the training needs matrix analysis. The matrix has identified training requirements for employees whose work activities may have a significant impact upon the environment. It is the responsibility of BUER to ensure that training requirements as per the training matrix at their respective Bu's is co-ordinated and monitored.

3.4.3 Communication

Transmission is committed to communicating its environmental responsibilities and management thereof both internally and externally as guided by communication Process Control Manual (PCM) for Manage Business Communication (240-84661605).

3.4.3.1 Internal Communication

Communication on environmental issues will take place through:

- Monthly reports
- Business Unit Meetings (as per BU governance structure)
- Microsoft Outlook e-mail system
- Transmission newsletters and publications
- Work Team Sessions
- Transmission Environmental Operational Forum

Communication may be focussed but not limited to:

- The Eskom SHEQ Policy
- Significant environmental aspects
- Environmental compliance obligations

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- Audit findings
- Environmental objectives i.e. importance of effective environmental management and of conforming to the environmental management system requirements
- Environmental awards and recognition
- Public complaints and compliments
- Environmental incidents
- Changes to the environmental management system
- Environmental performance trends / patterns both internally and externally
- Project specific environmental criteria to contractors and service providers
- Process(es) that enable(s) person doing work under Transmission control to contribute to continual improvements

3.4.3.2 External Communication

- Relevant communication will be recorded in an auditable manner e.g. register within the appropriate BU.
- Relevant written correspondence shall be documented within the relevant BU.
- All contraventions of legislation shall be reported to the delegated authorities (DFFE, DWS, etc.) as required.
- Communication with external stakeholders will be done by appointed persons, as and when required.
- Relevant external communication coordinated by the BUER will be done in consultation with Transmission Communication Business Partner.
- Concerns (i.e. complaints) logged or raised by external parties are to be documented, reported, investigated and dealt with.
- All media communication will only be done in conjunction with the BU Manager and the Transmission Communication Business Partner in conjunction with the Eskom Media Desk.
- A decision has been taken to communicate to external parties on the Eskom significant environmental aspects by means of the Eskom Integrated Report. Transmission provides input into the compilation of this report.

3.4.3.3 Communication roles

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RESPONSIBLE PERSON/BU	COMMUNICATION ROLE
COMMUNICATION DEPARTMENT/COMMUNICATION BUSINESS PARTNER (CAD)	<p>Communication Department will be responsible for:</p> <ul style="list-style-type: none"> • Providing strategic communication support to the Division • Publishing of environmental articles internally and externally • Facilitate communication strategies internal and external • Co-ordinate all media correspondence • Avail the Eskom SHEQ Policy and significant aspects at the request of external parties
BUSINESS UNIT MANAGER	<p>The BU Manager shall be responsible to</p> <ul style="list-style-type: none"> • authorise any BU related communication to external parties • communicating the importance of effective environmental management and of conforming to the environmental management system requirements • Ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the organisation
TRANSMISSION ENVIRONMENTAL DEPARTMENT	<p>The Transmission Environmental Department will be responsible for:</p> <ul style="list-style-type: none"> • Communication of all relevant environmental information to Transmission employees and people working on behalf of Transmission. • Corresponding and addressing all interested concerns related to Transmission. • Reporting on Transmission's environmental performance against set KPIs.

3.4.4 Control of Documented Information

Eskom has a documentation system, which caters for location, reviewing, retention and disposal of documents. The System is administered electronically via Intranet in accordance with Eskom Document Management Standard (32-644) and Document & Record Management procedure (32-6).

The EMS system requires certain processes to be followed, actions to be implemented and evaluate the effectiveness of these implemented actions. To ensure that the EMS is implemented and maintained in a standardised manner, EMS documentation and a number of forms supporting the documents listed in Appendix C were developed in driving uniformity throughout the Transmission division. Copies of EMS documents, excluding visual aids and records, can be obtained electronically via Intranet. Records include training records and the results of audits and reviews. List of minimum records and document retention is also specified in the procedure. Each BU will maintain their own environmental records as listed in their records matrix specifying all relevant records with retention period.

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3.5 Operation

3.5.1 Operational Planning and Control

Transmission has identified operations and activities with the potential to result in significant environmental aspects. The development of operational procedures for significant environmental aspect ensures that these are managed in a standardised and controlled manner to avoid deviation from SHEQ policy, objective and targets.

Transmission has diverse operations therefore BU/Grids have specific significant environmental aspects and for these BU/Grids will document and maintain operational work instruction for significant aspects and these shall comply with the Eskom Document Management standard and Procedure, (32-644 and 32-6).

BUERs are to ensure that applicable Transmission's environmental operational procedures and requirements are communicated to relevant employees and those delivering a service (e.g. suppliers, contractors).

3.5.2 Emergency Preparedness and Response

Transmission shall identify incidents arising from abnormal operating conditions, potential accidents and emergency situations in accordance with Emergency Planning Procedure (32-123). BU's must develop specific emergency preparedness plans which address the prevention and mitigation of any environmental impacts associated with accidents or emergency situations. The Environmental Emergency preparedness plan must be integrated into the BU/Site emergency preparedness plan.

Business Unit Managers are responsible for the development and implementation of integrated emergency preparedness programmes in order to achieve sound emergency preparedness objectives. SHEQ personnel within each BU will render an advisory service on BU EPP, periodically monitor and document the effectiveness of programmes/plans.

The emergency preparedness programmes will be based on the following:

- The establishing and maintaining of an effective infrastructure (e.g. emergency oil containment dams (structures) and equipment (e.g. oil spill kits) that will cater for emergency preparedness.
- The continuous and systematically identifying of environmental risks related to Transmission's business and the likely consequences of all emergency situations that can be reasonably foreseen.
- The developing and implementing of co-ordinated contingency (response and recovery) plans in order to bring the situation back to normal in the shortest possible time, most cost effective way, and preventing environmental impacts from occurring.
- By providing of resources with a variety of skills, knowledge, products, services and information necessary to help reduce or eliminate the consequences of emergency situations and increase their effectiveness to respond to and recover from emergency situations.
- Program to be tested periodically and response plans reviewed , updated as required after the occurrence of an accident or emergency situation. Business unit to provide relevant information and training related to emergency preparedness and response, as appropriate, to relevant interested parties, including persons working under its control

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3.6 Performance evaluation

3.6.1 Monitoring, measurement, analysis and evaluation

Transmission has established Environmental Monitoring and Measurement Work instruction 240-103644804 to monitor, measure, analyse and evaluate its environmental performance. The document details: what needs to be monitored and measured; methods for monitoring, measurements, analysis and evaluation as applicable to ensure valid results; the criteria against which the division will evaluate its environmental performance, and appropriate indicators; when the monitoring and measuring shall be performed; when the results from the monitoring and measurement shall be analysed and evaluated.

3.6.2 Evaluation of Compliance

Transmission will periodically evaluate and report on compliance obligations to relevant environmental legislation, regulation, and other requirements (i.e. internal policies and procedures, international treaties, International standard, applicable interested parties needs and expectations etc.) by conducting planned internal and external audit as per Table 3.7 i.e. legal compliance assessments as documented in SHE Compliance Obligations/Legal and Other requirements and Evaluation of Compliance Procedure (240-912140073). The legal compliance audits will be conducted at least once every three years for business areas with similar mandate in line with the Transmission EMS scope. Legal compliance audits are conducted to ascertain the level of compliance to legal obligations.

No	Assessment Title	Audit Body	Frequency	Description
1.	ISO 14001 Management System Internal Assessment	Transmission – peer assessment	Annually	Assessing conformance of the EMS to ISO14001 international standard requirements, compliance obligation and Eskom requirements
2.	SHE Legal & Other Requirements Compliance Audit	External service provider	Once every three years for business areas with similar mandate	Verification of compliance of Tx activities to the applicable environmental laws and other requirements as part of ISO 14001 certification requirement
3.	SHEQ Assurance Audit	Assurance & Forensic	Annually as per the plan	Data integrity (waste data)/ incidents
4.	Sustainability Reviews (Waste Management) EIA, Biodiversity, Data verification)	Sustainability Environment	Annually as per the plan	Assessing waste, EIA and biodiversity management practices on Tx sites in line with compliance obligations

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5.	DFFE / Inspectorate Compliance Inspections	DWS -	Authorities external	-	Verification of compliance to the conditions of the authorisations and licenses issued to the organisation
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Table 3.7: Transmission internal and external audits

3.6.3 Internal Audit

Transmission Division conducts internal audits at planned intervals to provide information on whether the EMS conforms to the Transmission Division own requirements and the requirements of the ISO 14001 standard and that it is effectively implemented and maintained.

3.6.3.1 Internal Audit Programme

Transmission follows the Business Management System audits standard (240-53413860) to carry out periodic internal audits for the environmental management system. Audit programme specifies the scope, frequency, methodology and responsibility for audits. The purpose of undertaking audits and internal assessments is to continuously assess the implementation and maintenance of EMS against the ISO14001 standard requirements.

All environmental internal audits shall be conducted by personnel who are trained in audit methodology and have at least 3 years business knowledge with working experience in environmental management field within Eskom Holdings. Environmental Management System Auditors shall be guided by the Business Management System audits standard (240-53413860).

3.6.4 Management review

Transmission leadership supported by environmental management representative shall review EMS at least once in a financial year during business review process as required in Transmission Business Management Review Procedure (240-80605850). Management addresses the possible need for changes to the SHEQ policy, objectives, and other elements of the EMS. Observations, conclusions and recommendations are document for necessary action and changes.

This will also apply to all BU management teams wherein the respective BU manager as the Chairperson, supported by the BUER shall review its EMS at defined intervals (not less than once per financial year) to ensure continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities of improvement and the need of changes of the EMS, including the SHEQ policy and objectives and targets. Minutes of the meeting must be retained as documented evidence of the results of management reviews.

The following are the minimum management review agenda items for discussion, but not limited to:

- a) the status of actions from previous management reviews;
- b) changes in:

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- 1) external and internal issues that are relevant to the environmental management system;
 - 2) the needs and expectations of interested parties, including compliance obligations;
 - 3) its significant environmental aspects;
 - 4) risks and opportunities;
- c) the extent to which environmental objectives have been achieved;
- d) information on the organization's environmental performance, including trends in:
- 1) nonconformities and corrective actions;
 - 2) monitoring and measurement results;
 - 3) fulfilment of its compliance obligations;
 - 4) audit results;
- e) adequacy of resources;
- f) relevant communication(s) from interested parties, including complaints;
- g) opportunities for continual improvement.

The outputs of the management review shall include:

- conclusions on the continuing suitability, adequacy and effectiveness of the environmental management system;
- decisions related to continual improvement opportunities;
- decisions related to any need for changes to the environmental management system, including resources;
- actions, if needed, when environmental objectives have not been achieved;
- opportunities to improve integration of the environmental management system with other business processes, if needed;
- any implications for the strategic direction of the organization.

Any decisions and actions related to possible changes to SHEQ policy, objectives, targets and other elements of the EMS consistent with the commitment to continual improvement shall be recorded in the management review minutes.

3.7 Improvement

3.7.1 Nonconformity and Corrective Action

Transmission has established and maintains procedures for Nonconformity, Corrective & Preventive Action (240-53464409 and 240-44175038); to determine the need for implementing corrective and preventative actions. All employees are empowered to report any nonconformities relating to environmental impacts. Corrective and preventative actions are taken to eliminate the causes of actual or potential non-conformities that are appropriate to the magnitude of problems and with the related environmental impact.

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3.7.2 Continual improvement

Transmission division is to determine opportunities continually improve the environmental management system for a) the enhancement of environmental performance, b) the fulfilment of compliance obligations and c) the achievement of environmental objectives. as documented in the monitoring, measurement, analysis and evaluation procedure.

4. Acceptance

This document has been seen and accepted by:

Name	Designation
Group Executive	Transmission Group
General Manager	Asset Management
General Manager	Engineering
General Manager	Energy Market and Services
General Manager	Grid Planning and Development
General Manager	International Traders
General Manager	Office of the Group Executive
General Manager	Operations and Maintenance (Grids)
General Manager	Transmission Projects Delivery
General Manager	System Operator
Senior Manager	Finance
Acting Senior Manager	Human Resources
General Manager	Procurement and Supply Chain Management
Transmission Group BMS Representatives	All Transmission Group BU's
Transmission Group BUERs	All Transmission Group BU's

CONTROLLED DISCLOSURE

5. Revisions

Date	Rev.	Compiler	Remarks
May 2022	4	P I Dlamini	Reviewed to align with the revised Transmission Operating Model
March 2018	3	P I Dlamini	Clarifying the context, internal and external issues, interested parties and risk & opportunities
September 2017	2	P I Dlamini	Changes to the document to align to the ISO 14001:2015 version
January 2016	1	P I Dlamini	Change of document number to align to Eskom new document numbering system.

6. Development Team

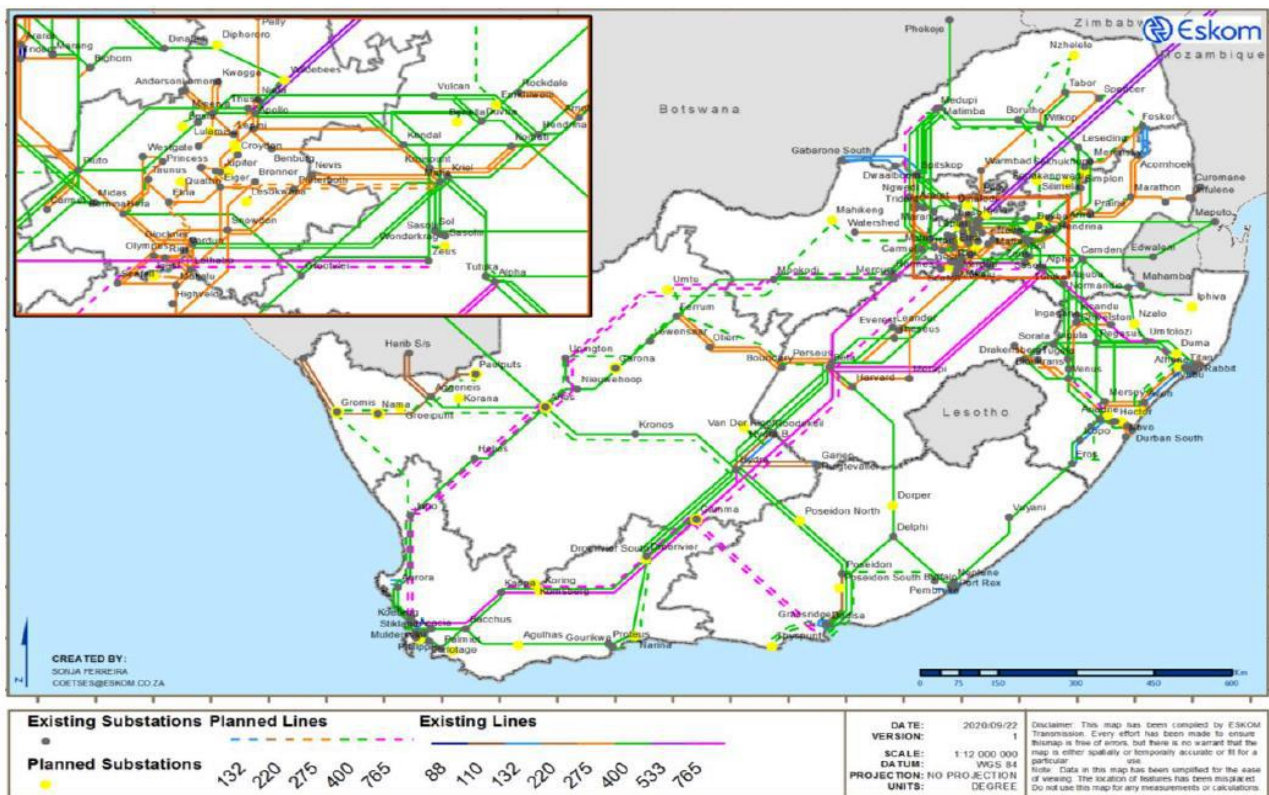
- Phindile Dlamini
- Silindile Mbhele
- Romi Bhimsan
- Precious Likhetho

7. Acknowledgements

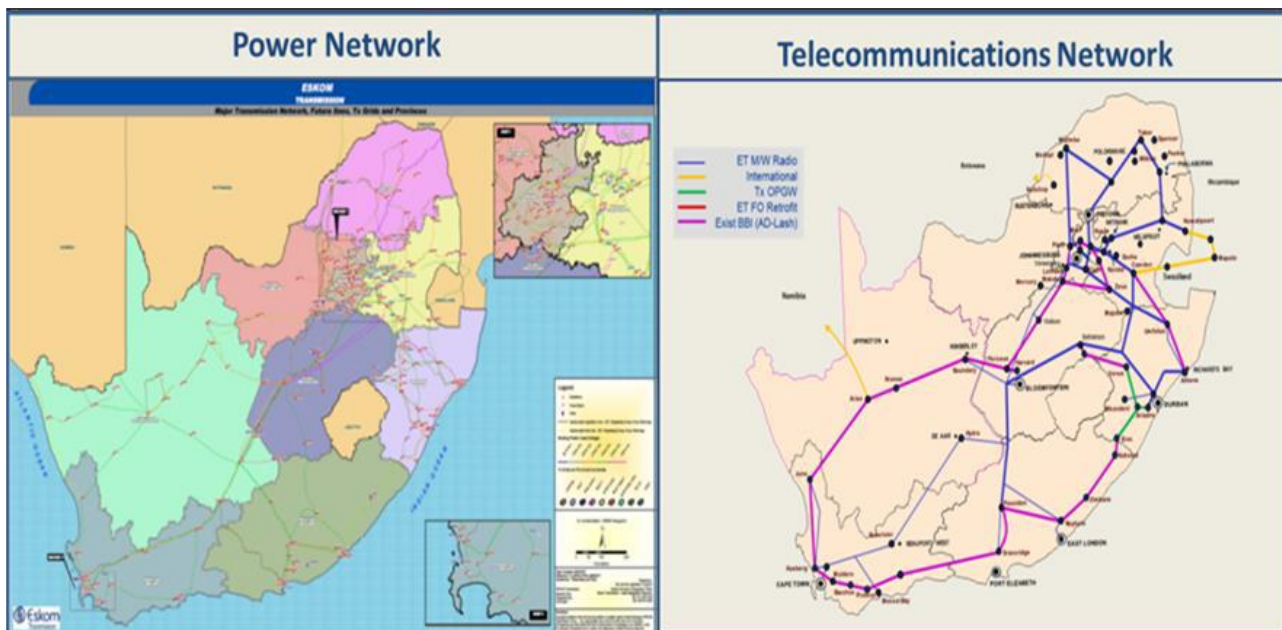
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Appendix A – Physical Boundary for Transmission Network

TRANSMISSION GEOGRAPHICAL SPREAD



POWER & TELECOMMUNICATION NETWORK



CONTROLLED DISCLOSURE

SOUTHERN AFRICA ENERGY GEOGRAPHICAL SPREAD



International Trader has traditionally operated mainly within the SADC region in terms of trading and business trading.

CONTROLLED DISCLOSURE

Appendix B: List of EMS documentation

Doc No.	Document Name	Doc Type	Content covered	ISO14001: 2015 Clause
EPL32-727	Safety Health, Environment and Quality Policy	Policy	Policy	Policy
240-82410629	Eskom Environmental Strategy	Strategy	Strategic Objectives	Objectives
240 – 78305014	Environmental Aspects and Management Programme/Plans requirements	Instruction	Assessment	Aspects
240-105049062	Transmission Business Management System Manual	Manual	Business processes	Context (Scope)
EPL 32-1163	Water Management	Policy	Water	Operation
EPL 32-736	Land and Biodiversity Policy	Policy	Biodiversity and Land Management	Operation
EPC 34-815	Land and Biodiversity standard	Standard	Biodiversity and Land Management	Operation
240-125346322	Eskom Biodiversity Implementation Plan	Plan	Biodiversity	Operation
240-133087117	Environmental Incident Management Procedure	Procedure	Incidents	Nonconformity, corrective and preventive action
32-123	Environmental Planning	Standard	Emergency Preparedness	Emergency Preparedness

CONTROLLED DISCLOSURE

EPC 32-303	Requirements For Safe Processing, Storing, Removing And Handling Of Asbestos Or Asbestos Handling Materials	Standard	Asbestos	Operation
240-52599304	Process Control Manual (PCM) for Environmental Management (Conceptual)	PCM	Assessment / Management Plan	Operation
240-87789043	Process Control Manual (PCM) for Execute Environmental Management (Basic)	PCM	Assessment / Management Plan	Operation
240-87789013	Process Control Manual (PCM) for Plan Environmental Management (Basic)	PCM	Assessment / Management Plan	Operation
32-6	Document and Records Management	Procedure	Document and Records	Documented information
32-9	Definition of Eskom Documents	Standard	Document control	Documented information
240-70172585	Vegetation Management and Maintenance within Eskom Land Servitudes and rights of way Standard.	Standard	Vegetation	Operation
32-829	Wildlife Interaction and	Standard	Wildlife	Operation

CONTROLLED DISCLOSURE

	Management Standard			
32-477	Safety, Health and Environment Training and Development procedure	Procedure	Training and awareness	Training and awareness
32-644	Eskom Documentation Management Procedure	Procedure	Document control	Document control
EPC 32-249	Environmental Indicator Reporting Standard	Standard	Reporting	Monitoring
EPC 32-245	Eskom Waste Management standard	Standard	Waste	Operation
240-162333184	Transmission bird collision Prevention Guideline	Guideline	Wildlife	Operation
240-44175038	Control of Non-conforming Product or Service Procedure	Procedure	Non-conformances, corrective and preventive action	Nonconformity
240-53464409	Non-conformity and Corrective Action Procedure	Procedure	Non-conformances, corrective and preventive action	Nonconformity
240-53413860	Business Management System Audit Procedure	Procedure	Auditing system	Auditing
240-43723778	Record Retention Matrix Format	Template	Records	Documented information

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240 - 98818649	Transmission Industry Waste Management Plan	Plan	Waste	Operation
240-67689003	Environmental Incident Classification Committee TOR	Terms Reference of	Incidents	Non-conformances and corrective action
240-80607408	Transmission Environmental Operations Forum TOR	Terms Reference Of	Performance reporting	Monitoring
240-131562376	Environmental Management Programme for Operation and Maintenance	Template	Operational control	Operation
240-52456757	Contract specification for vegetation management services on Eskom networks	Standard	Operational control	Operation
240-133339938	External/Internal Issues Environmental conditions	Register	Context	Context
240-80662342	Environmental Monitoring, measurement, analysis and evaluation	Instruction	Monitoring	Monitoring
240-84661605	Process Control Manual (PCM) for Manage Business Communication	PCM	Communication	Communication
240-133340382	List of Interested Parties Register	Register / Plan	Context Compliance obligations /	Context

CONTROLLED DISCLOSURE

240-133340326	Risks and Opportunities Register and Plan	Register / Plan	Context	Context
240-80650164	Transmission Business Plan	Plan	Context	Context
32-391	Integrated Risk Management Framework and Standard	Standard	Risks and opportunities	Context
240-53458685:	Management system review standard	Standard	Management review requirements	Management Review
240-141783373	Environmental Management System RACI for BU/Grid	RACI	Roles, responsibilities	Organisational roles, responsibilities, and authorities
240-131655011	Environmental Aspect /Impact Register	Template	Environmental aspects	Planning
240-131566734	Environmental Management Plan Template for Service Providers	Template	Planning actions	Planning

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