THE CONSIDERATION AND PRIORITISATION OF INTEGRATED ENVIRONMENTAL MANAGEMENT INSTRUMENTS TO FACILITATE THE INCREASED USE THEREOF

Acknowledgments: The following individuals made valuable inputs through their participation in the drafting of the discussion document on the consideration and prioritization Integrated Environmental Management (IEM) instruments to facilitate the increased use as decision-support instruments.

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Definitions

'Authority' – means authorities responsible for the development and implementation of integrated environmental management (IEM) instruments or tools;

'Decision making' – means any decision of an administrative nature made or required to be made under an empowering provision contained in law, related to an integrated environmental management instrument;

'IEM instrument' means IEM instruments as per NEMA Chapter 5;

'Integrated environmental management' – means a philosophy which prescribes a code of practice for ensuring that environmental considerations are fully integrated into all stages of the development and decision-making process. The IEM philosophy (and principles) is interpreted as applying throughout typical management activities of plan, do, act and check of any proposal (project, plan, programme or policy) or activity - at the local, national and international level - that has a potentially significant effect on the environment. Implementation of this philosophy relies on the selection and application of appropriate tools to a particular proposal or activity. The practice of IEM persists throughout the lifecycle of the project, plan or programme; and

'Instrument' – means a procedure to be followed to achieve the outcome of "Sustainable development outcomes and environmental protection are increasingly being realised through the appropriate development and use of a range of integrated environmental management instruments".

List of Acronyms

AEL	Atmospheric Emission Licence
ASM	Artisanal and Small-Scale Mining
BA	Basic Assessment
CAs	Competent Authorities
CCS	Coastal Conservation Strategies
CPM	Coastal Pollution Management
DAEARDL	Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform
DALRRD	National Department of Agriculture, Land Reform and Rural Development
DARDLEA	Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs
DEA&DP	Western Cape Department of Environmental Affairs and Development Planning,
DEA	Former Department of Environmental Affairs
DEDEA	Eastern Cape Department of Economic Development, Environmental Affairs and Tourism
DEDECT	North West Department of Economic Development, Environment, Conservation and Tourism
DESTEA	Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs
DFFE	National Department of Forestry, Fisheries and the Environment
DMRE	National Department of Mineral Resources and Energy
DPME	National Department of Planning, Monitoring and Evaluation
DWS	National Department of Water and Sanitation
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
EAPASA	Environmental Assessment Practitioners Association of South Africa
EDTEA	KZN Department of Economic Development, Tourism and Environmental Affairs
EIA	Environmental Impact Assessment
EIAMS	Environmental Impact Assessment and Management Strategy
EMF	Environmental Management Framework
EMPr	Environmental Management Programme
ESS	Earth Systems Strategies
EPR	Extended Producer Responsibility
GA	General Authorisation
GDARD	Gauteng Department of Agriculture and Rural Development
ICM	Integrated Coastal Management and Conservation
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
LEDET	Limpopo Department of Economic Development, Environment and Tourism
MES	Monitoring Emissions Standards
MPRDA	Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)
NAEIS	National Atmospheric Emissions Inventory System
NEM: AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM: BA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

NEM: ICMA	National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
NEM: PAA	National Environmental Management: Protected Areas, 2003 (Act No. 57 of 2003)
NEM: WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NGO	non-governmental organisation
NWA	National Water Act, 1998 (Act No. 36 of 1998)
OES	One Environmental System
PAJA	Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000)
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SEMA	Specific environmental management act
SEOR	State of Environment Outlook Report
SIA	Social Impact Assessment
SMART	Specific, Measurable, Acheivable, Relevant and Time-bound
SPLUMA	Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013)
WCs	Project Working Committees
WGs	Mintech Working Groups
WML	Waste Management Licence

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OVERVIEW

1. The Department of Forestry, Fisheries and the Environment (DFFE), in collaboration with other environmental authorities, are embarking on a process of considering the usage of Integrated Environmental Management (IEM) Instruments.
2. This initiative was informed by a presentation made at Mintech during early 2020 on how the environmental sector needs to identify, adopt and implement, or improve the use of an expanded range of integrated environmental management (IEM) instruments to –
   a) Improve on the goal of achieving sustainable development outcomes;
   b) Protecting natural resources;
   c) Improved regulatory efficiency; and
   d) reduce over-reliance on environmental impact assessment (EIA).
3. The Mintech Working Groups (WGs) were tasked to address this challenge. This resulted in the establishment of a Technical Working Committee to draft a discussion document to be presented to Mintech on the interventions to be implemented to address the challenge.
4. This document constitutes the discussion document to be presented to Mintech and was developed under the guidance of the Technical Working Committee. It includes the following:
   a) A clarification of the scope of work namely to include all the IEM instruments provided for in NEMA and the various SEMAs.
   b) A broad overview of the legal context for the development and implementation of IEM instruments.
   c) A discussion of the various IEM instruments provided for in NEMA and the SEMAs, related to –
      - relevant enabling provisions;
      - a brief summary of views expressed by stakeholders on its current and potential use;
      - a brief summary of potential concerns expressed by stakeholders related to these instruments;
      - proposed actions or interventions to be implemented related to every instrument; and
      - priority rating of instruments for which interventions are proposed.
   b) A summary on the way forward to implement the various actions and interventions, to be considered by Mintech for adoption.

INTRODUCTION AND BACKGROUND

5. Environmental authorities i.e. DFFE and provincial departments responsible for environmental management, are mandated to promote the conservation and sustainable utilisation of natural resources, to enhance economic growth and alleviate poverty, to protect and improve the quality and safety of the environment, and to promote a global sustainable development agenda. In its quest for better usage and management of the natural environment, the environmental authorities are guided by its constitutional mandate as contained in the Constitution. Accordingly, these authorities develop legislation, policies and strategies to implement its mandate.
6. In terms of Part A of Schedule 4 of the Constitution, “Environment” refers to a functional area of concurrent national and provincial legislative competence. In terms of section 41(1) (h) of the Constitution, all spheres of government and organs of state must co-operate with, consult and support one another.
7. At the technical intergovernmental coordination forum (Mintech) meeting that was held on 21 February 2020, a presentation was made calling for the environmental sector to identify, adopt and implement, or improve the use of other IEM instruments or tools to reduce over-reliance on EIA and to promote environmental protection whilst promoting sustainable development.
8. Based on the instruction from Mintech, the relevant WGs that were identified to address this task included the WGs responsible for integrated environmental management, waste management, air quality, and biodiversity and mining as well as law reform matters. However, this does not exclude other relevant WGs on coastal management and biodiversity, from participating in the initiative.

PURPOSE

9. Based on the instruction received from Mintech, the WGs established a Technical Working Committee to draft a discussion document to be presented to Mintech on the interventions to be implemented to address the challenge to improve and expand the use of IEM instruments. This discussion document aims to [1]–
   a) clarify the scope of work to be addressed in relation to the use and implementation of IEM instruments;
   b) provide a broad overview of the legal context for the development and implementation of all IEM instruments provided for in NEMA and the SEMAs;

[1] It should be borne in mind that it is not the purpose of the discussion document to identify inclusion and/or exclusions other than identifying IEM instrument that can used as decision-support to enhance the achievement of sustainable development outcomes whilst improving regulatory efficiency.

c) provide the reflections from authorities on the current and potential future use of these instruments and current challenges experienced;

d) identify proposed interventions needed to improve on the implementation of the various IEM instruments provided for in NEMA and the SEMAs; and

e) provide a summary on the way forward to implement the various interventions.

THE PROBLEM STATEMENT AND OUTCOME TO BE ACHIEVED

10. The problem statement:

The lack of development and implementation of other integrated environmental management (IEM) instruments, led to over-reliance on EIAs, to perform regulatory functions and ensure environmental protection whilst achieving sustainable development outcomes.

11. The outcome to be achieved:

Sustainable development outcomes and environmental protection are increasingly being realised through the appropriate development and use of a range of integrated environmental management instruments.

APPOINTMENT OF A TECHNICAL WORKING COMMITTEE (IEM WORKING COMMITTEE) AND ITS FUNCTIONING

12. Mintech issued an instruction during 2020 that a joint WGs meeting, comprised of WGs 2 (Air Quality Management), 5 (Integrated Environmental Management/Authorisations), 8 (Waste Management) and 9 (Climate Change) and 10 (Law Reform) be held to respond to the task[2]. The joint WGs met on 11 March 2020 and reflected on the request and agreed to establish an IEM Working Committee and to draft a discussion document on the development and implementation of IEM instruments to achieve the above-stated outcome, that will be presented to Mintech for adoption and implementation.

13. The task of the IEM Working Committee and the purpose of the discussion document is to-[3]

a) identify the range of IEM instruments provided for in NEMA and SEMAs that is available to achieve the above-stated outcome. Although this includes all components of IEM[4], it is acknowledged that priority attention must be given to the streamlining of regulatory processes related to environmental authorisations;

b) reflect on the development and implementation of all IEM instruments, including EIAs, provided for in terms of NEMA and the SEMAs to identify limitations, gaps and opportunities in the implementation of these instruments;

c) identify interventions to facilitate or improve the use of these instruments, including the need for policy and law reform; and

d) prioritise the interventions and identify lead authorities to coordinate the implementation thereof.

14. The IEM Working Committee is coordinated by DFFE (by the Chief Directorate: Integrated Environmental Authorisations). The Chief Directorate in collaboration with the IEM Working Committee is also responsible for the drafting of the discussion document and associated reports produced.

THE LEGAL CONTEXT FOR INTEGRATED ENVIRONMENTAL MANAGEMENT (IEM) IN SOUTH AFRICA

15. The environmental right contained in the Constitution provides the foundation for the management of the “environment” as a concurrent function between national, provincial and local mandate. This does not however, exclude the responsibility of municipalities towards environmental sustainability in the implementation of their mandates. Within this constitutional context, NEMA provides the overarching legal framework for environmental management in South Africa, supported by the SEMAs that further expands on specific environmental functional areas.

16. NEMA and the SEMAs include several enabling provisions for the development and implementation of IEM instruments, ranging from strategic level instruments to project level instruments – see figure 1.

17. Section 2 of NEMA sets out environmental management principles that must be considered by all authorities in the implementation of their functions. Section 23 of NEMA sets out objectives for the implementation of integrated environmental management.

[2] Although this does not exclude other relevant WGs from participating in this initiative

[3] Even though the instruction from the Mintech was precisely that the technical working committee should draft for the discussion document identifying other IEM tools that can be used as an alternative to EIA, the Working Committee went above and beyond the Mintech instruction by identifying all IEM tools including EIA to be used as decision-support instruments to achieve sustainable development goals

[4] IEM components include strategic assessments/ environmental planning, regulatory processes, project level compliance monitoring, reporting and performance management, as well as strategic level environmental monitoring, reporting and performance management

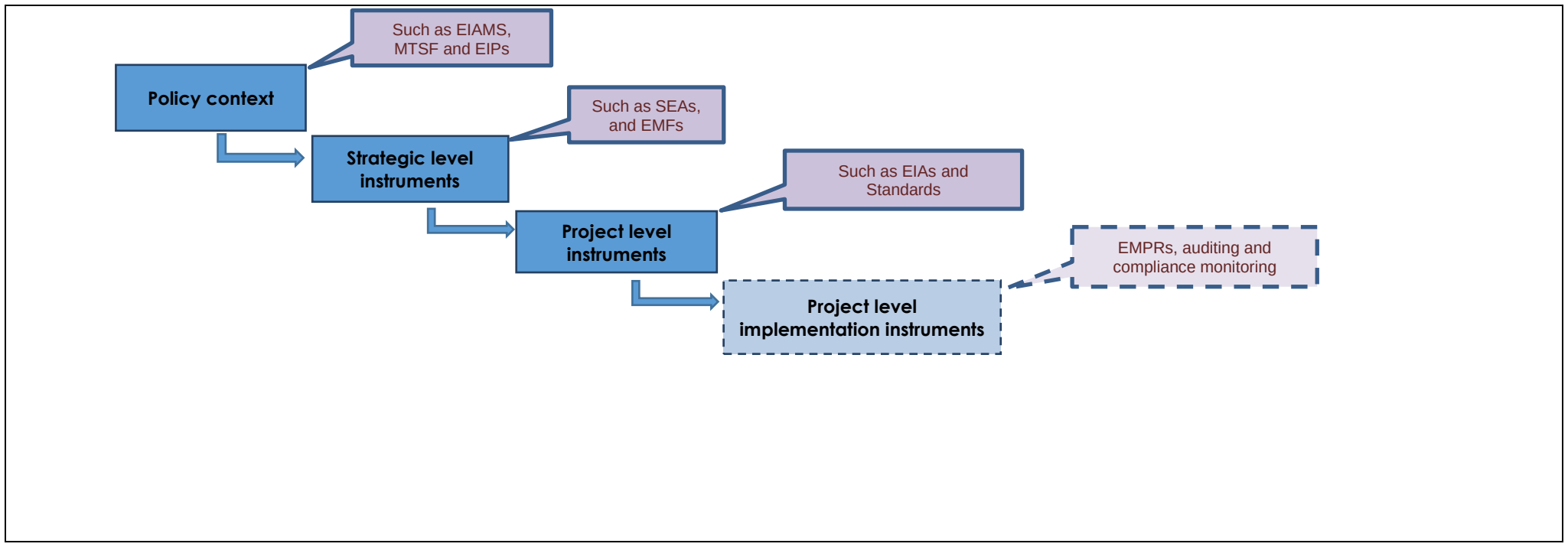

Figure 1: Tiers of integrated environmental management instruments

18. The One Environmental System: In terms of section 50A of NEMA, the One Environmental System (OES) was established in 2014 and sets in place a new dispensation for the country with respect to mining, which entails-

    a) that all environment related aspects would be regulated through one environmental system which is the principal Act and that all environmental provisions would be repealed from the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002);

    b) that the Minister responsible for environmental matters sets the regulatory framework and norms and standards, and that the Minister responsible for mineral resources will implement the provisions of the principal Act and the subordinate legislation as far as it relates to prospecting, exploration, mining or production operations;

    c) that the Minister responsible for mineral resources will issue environmental authorisations in terms of the NEMA for prospecting, exploration, mining or production operations, and that the Minister responsible for environmental matters will be the appeal authority for these authorisations; and

    d) that the Minister responsible for environmental matters, the Minister responsible for mineral resources and the Minister responsible for water affairs agree on fixed time-frames for the consideration and issuing of the authorisations in their respective legislation and agree to synchronise the time frames.

19. It is also important to highlight that there is a suite of instruments and tools enabled in other legislation such as SPLUMA, CARA, NWA, MPRDA, etc. which are of relevance in the integrated environmental management context. These instruments are not included as part of this discussion document.

DISCUSSION

20. **Integrated environmental management and its relationship with environmental assessment**

    a) It is important to define the relationship between integrated environmental management, environmental assessment and other associated concepts.

    b) In the EIAMS, "environmental management" was defined as **"***the management process to achieve the philosophy of Integrated Environmental Management***".** It also defines Integrated Environmental Management (IEM) as "*a philosophy which prescribes a code of practice for ensuring that environmental considerations are fully integrated into all stages of the development and decision-making process. The IEM philosophy (and principles) is interpreted as applying throughout typical management activities of plan, do, act and check of any proposal (project, plan, programme or policy) or activity - at the local, national and international level - that has a potentially significant effect on the environment. Implementation of this philosophy relies on the selection and application of appropriate tools to a particular proposal or activity. The practice of IEM persists throughout the lifecycle of the project, plan or policy.*" (As such, and for the purpose of this report, environmental management is regarded as the same as integrated environmental management

21. **The concerns related to EIA in the context of IEM**

a) The problem statement to this discussion document is founded on the concern that there is an over reliance on EIAs and that results in the perceived inappropriate use of EIA. To contextualise this problem statement, the following is highlighted:

- Globally, environmental impact assessment (EIA) has become the legal norm in the form of the duty to conduct an EIA before engaging in development projects that are likely to have a significant impact on the environment (Yang, 2019). This has resulted in the general and widespread adoption of EIA processes as a

good practice in environmental planning and governance – by both governments and society in general. In South Africa, as in most other countries, EIAs have become formalised as an integral part of the legislative framework toward sound environmental governance. However, this focus on EIAs has resulted in less attention being given to the development of other instruments.

- Globally and locally, EIAs have increasingly been criticised for not achieving the goal of sustainable development outcomes, resulting in renewed attention being given to the potential use of other instruments to contribute, alongside EIAs, to achieve the goal of sustainable development.
- The "*Report on Review the Effectiveness and Efficiency of the Environmental Impact Assessment (EIA) System in South Africa*" (DEAT, 2008) presented at the IAIA Conference at Stellenbosch, Cape Town in 2008 recommended that there was an urgent need to develop other NEMA Chapter 5 IEM instruments as well as to improve the use of environmental planning instruments mandated under different laws to compliment and supplement the use and implementation of EIA. Therefore, the presentation made by the LEDET at the Mintech about the finding of alternative instruments to lessen the over-reliance on EIAs is the testimony from the IAIA Conference recommendations.
- In terms of the legislative context for EIAs, numerous amendments have been made to NEMA and the EIA Regulations.

22. **The current use of IEM instruments:**

a) It is important to highlight that the existing legislative framework provides for the use of a range of IEM instruments in an integrated and complimentary manner. This is evident from the long list of instruments that are captured in Table 2. These instruments cover a wide range of interventions to manage the environmental (i.e. socio-ecological) and socio-economic implications of human actions. It certainly addresses environmental management beyond the project level regulatory approvals required for activities identified in NEMA and the SEMAs. However, uptake of these instruments has been relatively slow, and the primary attention has been focused on the implementation of EIAs as the primary informant to regulatory decision making.

b) A comprehensive list of IEM instruments provided for in the environmental legislation, is contained in Table 2. It also reflects the views of the various authorities on the implementation of these various instruments, the challenges experienced in its development and implementation, as well as proposed interventions to address these challenges[5].

23. **Initiatives to improve the use of IEM instruments:**

a) There are several initiatives that were recently conducted, or are in the process of being conducted, that are aimed at improving the use of specific IEM instruments, or to IEM instruments in general:

- The EIAMS 2014: The EIAMS for South Africa (DEA, 2014) was developed in order to address the shortcomings within the Integrated Environmental Management system and processes as identified in the '*Report on the Review of Effectiveness and Efficiency of EIA in South Africa*' (DEAT, 2008). The EIAMS entails the implementation, adaptation and/or reformulation of the Integrated Environmental Management (IEM) system currently being implemented in terms of Chapter 5 of the NEMA, in order to integrate effectively environmental considerations into all aspects of governance. The integration of environmental management principles into policies, plans, programmes, projects and processes is central to the implementation of the EIAMS.
- Report on evaluation/review of environmental impact system in South Africa (2019) (2019 EIA Review Study). The report was completed in 2019 (DPME/DEA, 2019). Subsequent to the finalization of the study, a technical Working Committee (representing the various competent authorities) was established to develop an implementation strategy for the findings of the study. The development of the implementation strategy is currently in process, and contains several recommendations, including:
  - Use instruments to speed up the decision-making process (flexible procedures) (current initiatives);
  - Develop a system for early exit option (procedural flexibility) (current initiative); and
  - Define and develop SMART objectives for the EIA system that are quantifiable and have well defined targets (current initiative).

This research initiative resulted in a number of implementation recommendations that are being further clarified in the implementation strategy that is currently being compiled.

- Review of the effectiveness of EMF practices – this is a current initiative that was started in 2020 and is in the latter stages of finalisation. The review study is aimed at improving the effectiveness of EMF practices.
- In November 2020, Cabinet approved that the Minister responsible for environmental matters and the Minister responsible for mineral resources collaborate on issues relating to the relationship between biodiversity management and mining activities. In this regard, section 39 of NEM: BA requires an integrated, coordinated and uniform approach to biodiversity management by organs of state in all spheres of government, NGOs, the private sector, local communities, other stakeholders and the public, through the development and adoption of a National Biodiversity Framework in terms of section 38 of NEM: BA. This

[5] It must be noted that the views expressed by officials were not necessarily evidence-based.

framework is deemed as an effective mechanism to achieve the collaboration.

b) The NEMA/SEMA Rationalisation Initiative – The objective of the initiative is to create a legal framework which is integrated, coordinated, and easy to understand and implement. This initiative provides various options for achieving sustainable development. This initiative must be based on a critical review of the current situation through a comprehensive research of the provisions of NEMA and the SEMAs. This is a long-term initiative that will be implemented in different phases

DATA GATHERING AND CONSULTATIONS WITH KEY AUTHORITIES

24. The research approach that was followed for this initiative was to capture the views and experiences of the various authorities that are involved in the development and implementation of IEM instruments. The purpose of gathering this qualitative data is to identify priority instruments (and proposed associated interventions) for the development of specific strategies for specific instruments as a next phase.

25. The key authorities: The key authorities that were approached to participate in the initiative, included:

a) The Department of Mineral and Resource and Energy (DMRE)

b) The Limpopo Department of Economic Development, Environment and Tourism (LEDET)

c) The Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)

d) The Gauteng Department of Agriculture and Rural Development (GDARD)

e) The Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA)

f) The KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA)

g) The North West Department of Economic Development, Environment, Conservation and Tourism (DEDECT)

h) The Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEA)

i) The National Department of Forestry, Fisheries and the Environment (DFFE)

j) The National Department of Water and Sanitation (DWS)

k) The National Department of Agriculture, Land Reform and Rural Development (DALRRD).

l) The Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA)

m) The Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform (DAEARDL) (did not participate).

26. Identification of functional areas: Based on the complexity and broad scope of work, as well as the existing legislative landscape, the Working Committee established specific functional areas which include:

a) Air quality management;

b) Waste management;

c) Environmental management;

d) Coastal management; and

e) Biodiversity and Mining.

27. The qualitative data that was gathered per functional area, included:

a) a list of IEM instruments or tools provided for in the enabling legislation.

b) a classification of the different instruments into at least one of more of the following four categories:

- *Strategic assessment/planning instruments* to identify important/sensitive environments such as EMFs, SEAs, SDFs, bioregional plans,, air quality priority areas, etc.
- *Instruments that inform (project level) regulatory processes* in terms of NEMA, the SEMAs and the various applicable statutes.
- *Non-regulatory environmental management instruments* to manage environmental impacts such as industry waste management plans, or
- *voluntary* organisation or sector-based instruments, etc.

c) A general reflection on the efficiency and effectiveness in using/implementing these various instruments. This is used to identify gaps to be addressed in the existing use of instruments, or to identify new /un-used instruments to be developed;

d) To identify and prioritize the work to be done considering the limited resources that is available to address the gaps and the develop of new or unused instruments; (refer to Table 3) and

e) Identification of the lead authorities (or Mintech Working Group) to coordinate the tasks to be done per instrument.

28. The method of data gathering and the analysis thereof was qualitative. Data was gathered through the distribution of questionnaires to identified (nominated) officials in the key authorities. Officials were encouraged to share their experiences and views related to the use of the instrument, the value thereof, the limitations and gaps, as well as the interventions required to improve the use of these instruments. These views were gathered per instrument for the different functional areas. A coordinator was identified per functional area to collate a single document per functional areas, with the combined inputs of all officials that participated in the functional area. The inputs from the five different functional areas were analysed and collated by DFFE into a single 1st draft discussion document. The draft discussion document was distributed to all participants for inputs. These inputs were considered and incorporated into a revised 2nd draft discussion document. The 2nd draft discussion document is submitted to an additional round of inputs before a final discussion document is produced. Although significant debate ensued on the content of the functional areas, Table 2 is a summary of views held by authorities. These views are not necessarily based on empirical data and does not in all instances represent the agreed view of all participants. This information does however, provide a source of qualitative data that can be further investigated by the technical Working Committees to be appointed for further research on priority instruments identified during this phase of the project. The information summarised in Table 2 provides a comprehensive list of IEM instruments and proposals to improve the development and use of these instruments to achieve effective IEM.

29. With specific reference to EIA as an IEM instrument, the following observations are made: In 2016, DFFE and DPME in collaborations with the provincial authorities responsible for environmental management, commenced with a study to evaluate the efficiency and effectiveness of the current EIA system. The study was completed in 2019 with publication of the "*Report on Evaluation of Environmental Impact Assessment (EIA) System*" (DEA/DPME, 2019). This 2019 Study aimed to answer three research questions, namely:

    1) To what extent has the EIA process been efficiently implemented?
    2) To what extent has the EIA process been effective in achieving its objectives, towards sustainable development?
    3) What key insights, lessons, and recommendations are offered, for improvement of the EIA process?

The findings of the 2019 Study (DEA/DPME, 2019) are not reflected in this discussion document other than to emphasise the need to create a balance in policy and law reform initiatives, as well as implementation practices, between time and cost efficiency on the one hand, and substantive (or sustainability) effectiveness on the other. The findings of the 2019 Study must be considered in future efforts to develop and implement other IEM instruments.

PRELIMINARY FINDINGS:

30. Detrimental environmental implications caused by human actions are not limited to identified activities for which EIAs must be undertaken in support of applications for environmental authorisation. There are various IEM instruments that were identified (enabled through legislation) to address such impacts at different levels:

    a) strategic instruments that are aimed at influencing strategic planning efforts across different functional areas (e.g. agriculture, development planning, mining, etc.) at all spheres of government and provide a strategic context for project-level assessments and decision making;
    b) regulatory instruments that *prescribe* project-level regulatory decision-making processes (e.g. EIAs and Standards);
    c) non-regulatory instruments that are used to *support* regulatory decision making (e.g. guidelines); and
    d) voluntary instruments that add value beyond the scope of listed activities and associated regulatory processes (Environmental Management Co-operation Agreements and voluntary organisation or sector-based Instruments).

31. Whilst the legislation makes provision for the development and implementation of a number of instruments, some of these instruments have not been developed, implemented or used optimally. There is a need to continue with the development of the various IEM instruments that have been identified in this discussion document.

32. From the responses received, it is clear that state and non-state stakeholder capacity building/ awareness raising is an important consideration in the development and implementation of instruments and interventions.

33. It is important to note that the purpose of the discussion document is not to perform a detailed analysis of each instrument. The purpose of the data gathered, and the findings/recommendations presented in this discussion document, is to identify the various IEM instruments provided for in legislation, to prioritise these instruments[6] and to propose interventions that should be considered when subjecting these instruments to a more detailed analysis during the next phase of the project.

34. Table 1 contains a summary of the number of instruments identified per functional area, for which interventions have been identified as high, medium or low priority, based on the deliberations by the IEM Working Committee.

35. Table 2 contains a comprehensive finding of the list of the IEM instruments detailing their uses, challenges, proposed interventions and recommended priority for interventions[7].

36. Table 3 contains a streamlined list of the regulatory IEM instruments that were deliberated upon and selected as priorities by the working committee to be considered

[6] It is acknowledged however, that the initial list of priority instruments may change over time.
[7] The challenges and interventions reflect the opinions (i.e. not necessarily evidence-based) of the stakeholders and will have to be considered and validated by instrument-specific technical Working Committees in the next phase.

for development to provide support to, or as alternatives to EIAs as per Mintech directive.

37. Table 4 presents the summary of the Regulatory IEM Instruments identified as priorities in Table 3.

IMPLEMENTATION PLAN OF THE PRIORITISED IEM INSTRUMENTS INTERVENTIONS (2024/25 – 2029/30)

38. At an implementation workshop held on the 21st of June 2023, it was recommended that clear implementation plan for the streamlined IEM instruments in Table 4 should be established. The implementation plan must be based on specific, measurable, achievable, relevant and time-bound (SMART) objectives. In order to streamline the implementation plan the responsible Mintech WG forums including national environment department as well as provincial environment sector departments had on August 2022 submitted a proposal for the interventions with focus on high priority IEM instruments as outlined in Table 4.

39. The following are the variables the proposal for the interventions focuses on;

a) The intervention proposed (focus only on high priority interventions);

b) Name of the instrument (focus only on high priority instruments);

c) Type of the instrument mentioned in (b) above (mention whether the instrument is strategic, regulatory, non-regulatory or voluntary);

d) Motivation for the intervention proposed;

e) Expected outcome/s of the proposed intervention;

f) A brief development and/or implementation plan for the proposed intervention;

g) Projected time-frame for the development and/or implementation of the proposed intervention;

h) Resources needed to develop and/or implement the proposed intervention; and

i) Lead agent (allocations of responsibility in the development and/or implementation of the proposed intervention.

40. Table 5 outlines the implementation plan as adopted by the responsible Mintech WG forums.

RECOMMENDATIONS ON THE WAY FORWARD:

41. As way forward, the following is recommended:

a) That the Mintech Working Groups, subject to Mintech's adoption thereof, use the findings of this report to inform the respective annual performance plans from the financial year 2024/25.

b) The different Mintech Working Group forums must identify instrument-specific interventions to be implemented in line with actions required to achieve the task objective. The findings of this Discussion Document must inform the identification of instrument-specific interventions.

c) . The Working Group Forums must draft project plans (with terms of references) to clarity the scope of work and timeframes for the identification and implementation of instrument interventions.

d) It is recommended that the chairpersons of the Mintech Working Groups present the project plans to Mintech for endorsement prior to commencing with the execution thereof. Thereafter the chairpersons of the Mintech Working Groups take responsibility to report progress to Mintech.

REQUEST TO MINTECH

42. It is requested that Mintech –

a) Note the contents of and support this Discussion Document on the Identification and development of priority Integrated Environmental Management (IEM) Instruments.

b) Endorse the incorporation of the findings of this Discussion Document into appropriate Mintech Working Group Forums annual performance plans.

c) Endorse the recommendation that once the Mintech Working Groups project plans with regards to the development and implementation of the instrument specific interventions have been finalised, it will be submitted to MinTech for endorsement prior to commencement/execution.

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Table 1: Summary of IEM instruments per consolidated functional area and priorities for interventions

Functional area	High Priority	Medium Priority	Low Priority
Environmental Impact Management	8	8	9
Air Quality	8	11	2
Biodiversity and Mining	6	5	4
Waste Management	8	1	7
Coastal Management[8]	5	6	8[9]

[8] Coastal management is not fully covered in this draft discussion document hence the line function is yet to nominate a representative to the Working Committee

[9] With reference to Table 2, Table 1 focuses on the consolidation of the instruments rankings as per classification/category either single or dual or more for each identified instrument.

Table 2: Comprehensive list of the IEM instruments findings

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
1	Environmental Impact Assessment	Regulatory instrument in terms of section 24F of NEMA and the EIA Regulations and Listing Notices, for activities identified in terms of section 24(2)(a) and (b) of NEMA	EIAs constitute a project level environmental assessment instrument that assesses the effect of a proposed development on the biophysical environment, socio-ecological and socio-economic conditions. The purpose thereof is to inform decision making on applications for environmental authorisation. The EIA process is a well-establish, internationally accepted process with well-defined procedures from initiation to finalisation to inform regulatory decision making processes. Is focused on addressing negative impacts and the enhancement of positive impacts in accordance with the impact mitigation hierarchy. Provides information as the rational basis for decision making that is focused on sustainable development outcomes. Provides appropriate measures for mitigating, monitoring and managing potential impacts. Enables appropriate and efficient resources use due to improvement of the environmental design for the proposed project. There is compliance with environmental standards designed to avoid or reduce social & environmental degradation. Saves capital and operating costs because risks and impacts are identified, avoided or mitigated. Provide stakeholders with information in an objective manner on the implications of developments. Better project acceptance by the public, whilst promoting environmental awareness and accountability of applicants. Informs decision making by the authorities consistent with the principles of fair and just administration.	EIAs are predominantly reactive to development proposals. If done late in the project planning process, EIAs add time to the project duration. EIAs are often costly. Time constraints of the EIA process sometimes hamper the substantive effectiveness of EIA processes (i.e. the ability to achieve sustainable development outcomes). The strong focus in South Africa on procedural efficiency (i.e. time and cost) is eroding the substantive effectiveness of EIAs (i.e. achieving sustainability outcomes). Has a narrow perspective and includes a high level of details. The EIA process has fixed, inflexible content and procedural requirements. This results in an inappropriate 'one size fits all' approach. Listed activities do not respond to (differentiate between) different sensitivities of the receiving environment. Regulatory screening (BA or S&EIR) is too robust to cater for differentiation /flexibility in the level and type of assessment to be followed. Lack of flexibility to change the EIA process to be followed. Timeframes do not respond to complexity and sensitivity. Poor compliance.	Ongoing research is required to inform the improvement of EIAs, but also to address many of the perceptions of stakeholders (some of which is included in this document). Increased efforts must be made to convey existing research finding to stakeholders. Introduction of procedures to allow for, where appropriate, a reduced regulatory process, including the option to exit the regulatory process in instances where environmental implications of developments are not significant. Need to introduce a flexible screening process to create more options related to the level and type of assessment that is required during an EIA process. In other words, there is a need to use screening to improve use of flexibility, discretion and differentiation in the EIA process. With respect to triggers/identified activities; the focus needs to change to mostly environmental attributes/characteristics and geographic areas-based activities rather than development types. Need to get the strategic context right through the implementation of environmental planning initiatives (especially EMFs). The Need and Desirability Guideline is an effective mechanism to operationalise the sustainability principles of NEMA in EIA processes. However, it is poorly implemented and the quality of EIA processes can be improved through the rigorous implementation of the Need and Desirability guideline. Information and timeframe requirements to be determined by flexible screening process. EIAs must become objectives-led, rather than baseline-led. This means that an EIA for a development must be measured against sustainability objectives (outcomes) rather than being measured against a baseline condition. Capacity building of officials to ensure that the focus on procedural compliance does not replace to need to review substantive effectiveness. Equally so, capacity building of external stakeholders is required. More attention must be given to the integration of regulatory processes (of different regulatory authorities) to reduce overlapping information requirements and public consultation requirement. Where integration cannot be achieved, at least alignment should be considered. The registration of EAPs (and implementation of a Continuous Professional Development system) must be expedited to contribute to the improvement of the quality of EIA	High	Mintech Working Group 5 (DFFE, DMRE and provincial authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
					processes (i.e. both conducting and reviewing EIAs). Registration is not a silver bullet.		
2	Environmental Management Programmes (EMPrs) (section 24N of NEMA and as prescribed in Regulations)	Regulatory instruments in terms of section 24(N) of NEMA and EIA Regulations, as an integral part of an EIA process	Traditionally, EMPrs are used as part of the EIA process [in terms of section 24N of NEMA and the EIA Regulations) to implement the management measures associated with the impacts that were assessed as part of the EIA process. To identify practical impact management outcomes and impact management actions, which can be used for the avoidance, management and mitigation of impacts and risks associated with the development and which were assessed as part of the EIA process. In its traditional use of EMPrs it is an implementation mechanism (and not as impact assessment mechanism) that sets out roles and responsibilities for the implementation of mitigation measures that is the outcome of the EIA process.	EIA follow-up must be improved and EMPrs are essential components thereof, but there is inadequate monitoring and enforcement thereof. Lack of training on development and implementation of EMPrs. The concern was expressed that EMPrs should not be used as assessment instruments but as implementation instruments for mitigation, including avoidance, following an environmental assessment process (either at a project level through an EIA, or at a strategic level through an SEA or other such strategic assessment). Such an assessment should be consistent with the IEM objectives in section 23 and the minimum requirements of section 24(5) (bA) of NEMA. There is confusion on the apparent / perceived use of EMPrs as it is used as an alternative to EIAs (the Generic EMPRs used as instruments to exclude the requirement for EA). The different uses of EMPrs must be clarified to ensure its appropriate use and appropriate information base for the various possible uses (i.e. prerequisites, scope and content).	Clarify the role of EMPrs to resolve the perception of it being used as an assessment and decision-making instrument (e.g. the Generic EMPrs for the Working for Programmes), versus a management /implementation instrument whether as part of the EIA process or any other assessment process (i.e. prerequisites, scope and content). There is a need for training on the development and implementation of EMPrs. There is a need to improve of EIA follow-up through improved monitoring and enforcement of EMPr implementation.	Medium	Mintech Working Group 5 (DFFE and other environmental authorities)
3	Environmental Management Programmes [section 24(2)(e) of NEMA]	Regulatory instruments in terms of section 24(2)(e) of NEMA used to exclude from the requirement to obtain an environmental authorisation for activities identified in terms of section 24(2)(a) and (b) of NEMA.	To identify activities that can be excluded from the requirement to obtain environmental authorisation if implemented consistently with an environmental management instrument. Recently EMPrs have been developed in terms of sections 24(2)(c) and (e) of NEMA, and are used to provide exclusion from the requirement to obtain an environmental authorisation (sometimes referred to as Generic EMPrs)	Currently, the only instruments that have been developed in terms of this provision, are the Generic EMPRs for the Working programmes. The potential confusion regarding the use of EMPs as an alternative to EIAs (the Generic EMPrs used as instruments to exclude from the requirement for EA) is discussed in the previous row related to EMPrs The enabling provision in NEMA makes provision of environmental management instruments which is not limited to "Generic EMPrs". .	There is a need to clarify the prerequisites, scope and content of environmental management instruments that can be developed in terms of section 24(2)(e) of NEMA. Improved public awareness is required on the use of these instruments.	High	Mintech Working Groups (DFFE and other environmental authorities)
4	Environmental Risk Assessments (Risk Assessments)	Regulatory instruments in terms of section 24(5)(bA) of NEMA (soon to be defined and amended in NEMA when NEMLA comes into effect)	Risk assessments have the potential to be used as a stand-alone regulatory instrument (as an alternative to EIAs) or as a specialist assessment as part of an EIA process. Currently, it is not used as a stand-alone regulatory instrument, but as a specialist input in support of EIAs and decision-making Risk assessment constitutes a process for estimating the likelihood or probability of an adverse outcome or event and is complementary to EIA and risk management. It is a flexible tool that can be applied at a variety of scales and levels of	Lack of clarity on the current and potential use and applicability of the instrument (especially the potential use to grant exclusion from requiring environmental authorisation, for identified activities, based on a risk assessment)... Risk assessments may be complex and difficult to implement as an instrument in the EIA process, in complex environmental conditions. No regulations in place, but there is a guideline in place.	There is a need to clarify the relationship between risk assessments and EIAs. Put differently, risk assessments could be a specialist study as part of an EIA process, or a decision-making instrument as an alternative to the EIA process, or a stand-alone process that does not necessarily constitute an alternative to an EIA. There is a need to investigate the use of a risk assessment as a component of environmental management instruments developed in terms of section 24(2)(c), (d) and (e) of NEMA, similar to the way that it is used in the generic water use license process (i.e. the instrument will apply if an environmental risk can be shown to be below a threshold/requirement).	Low	Mintech Working Group 5 (DFFE and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
			detail; for a variety of environmental issues; and various time scales. It is a scientific process that identifies and evaluates the likelihood of an activity to impact or degrade the environment and can be used to exclude activities from requiring EA in specific areas. This includes describing potential hazards and impacts before taking precautions or mitigation measures to reduce the risks. As a regulatory instrument, risk assessment could be used to exclude activities from EA at project level.				
5	Norms and Standards	Regulatory instruments in terms of s24(2)(d) and s24(10) of NEMA, used to provide exclusion from the requirement to obtain and environmental authorisation for activities listed in terms of s 24(2)(a) and (b) of NEMA.	Law reform at the level where the objective of the integrated authorisation can finally be achieved in the environment sector. Standards (and norms) are developed in terms of section 24(2)(d) of NEMA and used to provide exclusion from the requirement to obtain an environmental authorisation. As such, Standards and norms are decision-making instruments as an alternative to EIAs and EAs. This is an instrument to assist in (applicable to) project level assessments. Allows a proponent to undertake activities that would usually require EA that are within the scope of the norm or standard, and that can comply with the specifications of the norm or standard to process without obtaining EA. This aims to standardise or normalise the undertaking of activities in a way that avoids and minimises environmental harm. Identification of Zones through EMFs or other strategic assessments and development of associated standards wherein certain development activities that would have normally been subjected to EIA process can be registered and undertaken in terms of the standards. Existing standards include: • Gauteng EMF Standard • Abalone Standard (draft) • Trout Standard (draft) • Electrical and Grid Infrastructure Corridor Standard (draft) • Western Cape Sandveld Standard (draft).	Current limitations exist where a development consist of activities that are also contained in other legislation other than the EIA Regulations and this limits the full benefit of such standards and norms as the proponent will still be required to apply in terms of the said legislation. A standardized practice for standards has not yet established. This results in long delays as there are differences of opinion regarding the content requirements of such standards and norms (e.g. specialist inputs, third party verification, notification, use of risk aversion, reporting requirements, etc.)	Application of standards to be clarified by enabling the use of an alternative instrument where a standard (or norm) is not the preference of an applicant (it is argued that it cannot be done as one either is excluded from the EA requirement or not). Several aspects related to standards must be clarified: • The use of 3rd party verification on the presence/absence of impacts or risks (i.e. falling within specifications of a standard). • Reporting requirements; • Public participation versus public notification • Ensure NEMA standards (or norms) can also be used for NEM: WA and NEM: AQA. Public awareness and capacity building on the role and use of standards and norms are required	High	Mintech Working Group 5 (DFFE and other environmental authorities)
6	Instruments developed in terms of section 24(2)(c) of NEMA	Regulatory instruments in terms of section 24(2)(c) of NEMA, used to provide exclusion from the requirement to obtain an environmental authorisation for activities identified in terms of section 24(2)(a) and (b) of NEMA.	The identification of geographical areas based on environmental attributes, and specified in environmental management instruments, adopted in the prescribed manner by the Minister or MEC, with the concurrence of the	There is no clarity on the content requirements for such instruments, yet initiatives are supported or not, based on views on what must be included in such instruments. The enabling provision does not	There is a need to clarify the prerequisites, scope and content of environmental management instruments that can be developed in terms of section 24 (2)(c) of NEMA. Clear guidelines must be set to assist with	High	Mintech Working Group 5 (DFFE and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
			Minister, in which specified activities may be excluded from the requirement to obtain an environmental authorisation from the competent authority. It must be noted that current law reform (i.e. NEMLA Bill) proposes that section 24(2)(c) be amended to add "…*but which must comply with the requirements set in such environmental management instrument, if any*".	provide for setting of requirements to be adhered to in instances where the instrument applies. However, should the current law reform be finalised, this challenge will be resolved.	the drafting of such instruments and avoid unnecessary delays (e.g. the need for registration to use the instrument, public notification, reporting, compliance monitoring, etc.). There is a need to investigate the use of, amongst others, risk assessment as a component of environmental management instruments developed in terms of section 24(2) (c) of NEMA, similar in the way that it is used in the generic water use license process i.e. the instrument will apply if an environmental risk can be shown to be below a threshold/requirement. Public awareness and capacity building regarding the role and use of these types of instruments are required.		
7	Instrument in terms of section 24(2)(e) of NEMA	Regulatory instruments in terms of section 24(2)(e) of NEMA, used to exclude from the requirement to obtain an environmental authorisation for activities identified in terms of section 24(2)(a) and (b) of NEMA.	The identification of activities that, based on the environmental management instrument adopted by the Minister or an MEC, with the concurrence of the Minister, may be excluded from the requirement to obtain an environmental authorisation from the competent authority: As an outcome of the Square Kilometre Array (SKA) SEA, an Integrated Environmental Management Plan (IEMP) was developed. In the IEMP the intention was expressed to declare the SKA areas as a protected area in terms of section 38 of NEM: PAA. The IEMP for the SKA was used in an innovative approach as a regulatory instrument to motivate for the exclusion of certain identified or listed activities from requiring an environmental authorisation in terms of section 24(2)(e) of NEMA. The Generic EMPrs for Working for (….) and Land Care projects were also developed and gazetted for implementation in terms of section 24(2)(e) of NEMA.	There is no clarity on the content requirements for such instruments, yet initiatives are supported or not, based on firm views on what must be included in such instruments. The enabling provision does not make provision for setting of requirements to be adhered to in instances where the instrument applies.	There is a need to clarify the prerequisites, scope and content of environmental management instruments that can be developed in terms of section 24(2)(e) of NEMA. Clear guidelines must be set to assist with the drafting of such instruments and avoid unnecessary delays (e.g. the need for registration to use the instrument, public notification, reporting, compliance monitoring, etc.). There is a need to investigate the use of a risk assessment as a component of environmental management instruments developed in terms of section 24(2)(e) of NEMA, similar in the way that it is used in the generic water use license process (i.e. the instrument will apply if an environmental risk can be shown to be below a threshold/requirement. Public awareness and capacity building on the role and use of this instrument are required.	High	Mintech Working Group 5 (DFFE and other environmental authorities)
8	Written or Oral Request in Emergency Situations	Regulatory instrument in terms of S30A of NEMA	In line with section 30A of NEMA, the competent authority may on its own initiative or on written or oral request from a person, direct a person verbally or in writing to carry out a listed or specified activity, without obtaining EA, in order to prevent or contain an emergency situation or to prevent, contain or mitigate the effects of the emergency situation.	To ensure consistency in the use of this instrument, there is a need to provide more guidance on where and how this instrument should be used. A concern has been expressed that there is poor compliance monitoring on the current implementation of this instrument.	To ensure consistency in the use of this instrument, there is a need to provide more guidance on where and how this instrument should be used. There is a need for guidance and capacity building and awareness raising to improve on follow-up (i.e. reporting and compliance monitoring). Public awareness and capacity building on the role and use of this instrument are required	High	Mintech Working Groups (DFFE and other environmental authorities)
9	Minimum Information Requirements	Regulatory instruments in terms of section 24(5)(bA) of NEMA, used as an integral part of the EIA process	Support of EIA and not a decision-making instrument. To set in place standardized requirements for EIA processes that is specific to a sector or type of	The current application of minimum information requirements is not clear.	More guidance on the intention and use of this instrument must be provided. Also consider law reform to allow for the wider application of this instrument beyond the identified activities in NEMA.	Medium	Mintech Working Group 5 (DFFE and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
			development, within the context of the prescribed EIA process as per the EIA Regulations.		Need to investigate the use of minimum requirements that is not only linked to (or limited by) the current EIA process. Investigate the possibility that MECs can also develop minimum requirements that are province specific.		
10	Environmental management co-operation agreements	Non- Regulatory instrument in terms of section 35 of NEMA	This is an alternative (general) management instrument provided for in terms of section 35 of NEMA. The Minister and every MEC and municipality, may enter into environmental management co-operation agreements with any person or community for the purpose of promoting compliance with the principles laid down in this Act.	This instrument is not effectively used (no agreements are currently in existence).	It is recommended that a discussion document be drafted on the implementation of this instrument. Also investigate this instrument as a mechanism to move towards performance management at municipal level (e.g. the identification is sustainability objectives per municipality and then entering into a co-operation agreement). This will be consistent with and in support of the oversight and support role of provinces towards municipalities as set out in section 16 of NEMA. Investigate the possible use of environmental management co-operation agreements as an environmental performance management instrument at municipal level, against identified sustainability objectives which will contribute to the provincial support and oversight role related to municipalities as contained in section 16(4) of NEMA.	Medium	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities
11	Environmental Protocols	Regulatory instruments in terms of the EIA Regulations that is integrally linked to the EIA process.	Support of EIA and not a stand-alone decision-making instrument. Inform the specialist assessment done during the EIA process and is not a decision-making tool on its own.	Currently there is no adopted or formalised procedure on common practice to ensure consistency in the use thereof (i.e. scope and content). The scope of potential use of protocols is not clear – it seems to be limited to the EIA process, and cannot prescribe an alternative process to replace the BA of Scoping/EIR process.	There is a need to investigate the use of environmental protocols as an environmental management instrument separate from the EIA process, or as an alternative to the EIA process, for NEMA identified activities. Also a need to investigate the possibility for protocols to be applied to policies, plans, programmes, processes and activities. However, the same as with Minimum Requirements, the definition of "activities" in NEMA must be amended to allow the application of Environmental Protocols beyond the NEMA identified activities as the definition of "activities" refer back to section 24(2)((a) and (b) of NEMA. Investigate the possibility that MECs can also develop protocols that are province specific.	Medium	Mintech Working Group 5 (DFFE and other environmental authorities)
12	Pollution incidents	Regulatory instruments in terms of section 30 of NEMA	Section 30 of NEMA deals with the reporting of and response to an unexpected, sudden and uncontrolled release of a hazardous substance, including from a major emission, fire or explosion; that causes, has caused or may cause significant harm to the environment, human life or property which is defined as an "incident" in section 30(1) of NEMA. Section 30 allows a municipality, a provincial head of department, the Director-General, or any other Director-General of a national department, to direct the responsible person to undertake specific measures within a specific time to fulfil his or her obligations to manage	This is an essential instrument to address significant impacts related to pollution incidences. However, there is a need to broaden the scope of the above provision to include incidents pertaining to raw discharge of sewage and sewage spillages. Raw sewage incidents cause pollution to water resources and also contravenes a number of constitutional rights which includes the rights to human dignity and an environment that is not harmful to health or well-being. More guidance is needed to ensure the consistent use and implementation of the control pollution incidents.	Section 30 deals with the reporting of and response to an unexpected, sudden and uncontrolled release of a hazardous substance, including from a major emission, fire or explosion; that causes, has caused or may cause significant harm to the environment, human life or property which is defined as an "incident" in section 30(1) of NEMA. There is a need to broaden the scope of the above definition to include incidents pertaining to raw discharge of sewage and sewage spillages.	Medium	Mintech Working Groups 8 (DFFE and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
			pollution incidents. This as a broad mechanism in terms of section 30 of NEMA to prevent and address environmental harm related to pollution incidences.				
13	Model Environmental Management Bylaws	Regulatory instrument in terms of s46 of NEMA, linked to the environmental responsibilities of Municipalities	This is a regulatory instrument to govern environmental management at a municipal level linked to their municipal mandates. The Minister may make model bylaws in terms of section 46 of NEMA, aimed at establishing measures for the management of environmental impacts of any development within the jurisdiction of a municipality, which may be adopted by a municipality as municipal bylaws.	This instrument is not used to date The environmental management responsibilities of Municipalities linked to their mandates and execution of their duties, are increasingly becoming a governance concern.	A technical Working Committee should be established to investigate the approach that the sector should take on the use of separate model bylaws or a general model bylaw – or possible a discussion paper One of the challenges is that many municipalities do not have appointments in their structure for environmental staff. DFFE is therefore apprehensive how these bylaws will be implemented or enforced. Can be a proactive mechanism to improve environmental governance at municipal level. Also, it will encourage municipalities to take ownership of environmental management within their areas of jurisdiction.	Medium	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities
14	Duty of Care directives	Regulatory instrument in terms of section 28 of NEMA	This as a broad mechanism provided for in section 28 of NEMA to prevent and address significant pollution and degradation of the environment in general. The "duty of care" is a legal requirement that is placed on everyone. Directives issues in terms of section 28(4) of NEMA is a regulatory instrument where a person can be directed to cease any activity, operation or undertaking, to investigate, evaluate and assess the impact of specific activities and report thereon and commence taking specific measures before a given date.	Improve on the guidance to Municipalities on the use of section 28 of NEMA once NEMLA 4 is enacted.	Rationalise the duty of care provisions in the various NEMA and SEMAs. The current law reform process (NEMLA 4) proposed that this instrument (i.e. the ability to issue directives) also be made available to be used by municipalities – this is a positive step forward. Capacity building and awareness is needed on the use of this instrument at municipal level.	Low	Mintech Working Groups 4 (DFFE and other environmental authorities
15	Environmental Feasibility Assessments	Non-Regulatory instrument, or a regulatory instrument provided for in terms of section 24(5)(bA) of NEMA (possibly to be moved in NEMLA to definitions)	Currently there is little clarity on the intended use of this instrument as a non-regulatory or regulatory (voluntary) instrument (i.e. no guidelines or Regulations). Although this instrument is part of the list of instruments provided for in section 24 of NEMA, currently, this instrument is mainly used as a non-regulatory instrument to inform investment decisions of developers and financial institutions. The fundamental question to be answered through an environmental feasibility analysis, is to determine if there is any specific aspect of the project that presents a fatal flaw that will make environmental approvals impossible. Assesses the viability of a proposed development from an environmental and social perspective, identifying potential issues and concerns (risks) to the successful and sustainable completion of proposed developments.	There is no clarity on the use of feasibility assessments as there are no Regulations and no guidelines to inform the intended use thereof in the environmental sector. Considering the definition of "environment", it can be argued that any EIA is supposed to implement a feasibility assessment approach to developments. The introduction of such an instrument may result in overlaps and duplication with the EIA process.	It is recommended that a discussion document on the use of this instrument be developed, both as a regulatory and non-regulatory instrument. The discussion document should also discuss the relationship between environmental feasibility assessments and the EIA process.	Low	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
16	Compliance Notices	Regulatory instrument in terms of section 31L of NEMA	An environmental management inspector may issue a compliance notice if there are reasonable grounds for believing that a person has not complied with designated provisions of the relevant environmental legislation, or with a condition of a permit, authorisation or other instrument issued.	None	Rehabilitation in terms of noncompliance often does not result in a suitable outcome from a sustainability perspective as many activities cannot be effectively reversed.	Low	Mintech Working Groups 4 (DFFE and other environmental authorities)
17	Sustainability appraisals	Regulatory instruments in terms of SPLUMA, The Municipal Systems Act (MSA) and MSA Regulations	Provides a critical evaluation of the performance of a policy, plan or project against predetermined social, economic and environmental criteria and improves its performance. Helps to inform decision-making by providing information on the potential environmental implications of policies, plans or projects. Effective in integrating sustainability considerations into plan making and evaluation and has the advantage of being quicker than a standard SEA. Allows fairly rapid assumptions to be made about the sustainability impact of individual policies, plans and projects. Indicates where policy adjustments need to be made.	It is not clear if sustainability appraisals are linked to any of the environmental management instruments contained in NEMA. Sustainability appraisals are not listed as an IEM instrument in NEMA, although it can be considered a form of SEA, it is not widely used in South Africa. Guidelines on its use are not available in South Africa.	Clarity must be provided when how and who must use sustainability appraisals, especially if used across the whole policy plan programme and project spectrum	Medium	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities
18	Exemptions	Regulatory instrument in terms of section 24M of NEMA. Exemptions may be granted from any provision of NEMA, except from the provision of section 24(4)(a) or the requirement to obtain an environmental authorisation contemplated in section 24(2)(a) or (b).	Exemptions are not used as a regulatory instrument on its own, but as an integral part of regulatory instruments (e.g. as an integral part of the EIA process). Exemptions can be granted to provide alleviation from some of the administrative requirements of the EIA process. Exemption cannot be granted from the requirement to obtain EA. Create flexibility in the application of the regulatory processes, especially the EIA process.	It is debatable if this should be considered an environmental Instrument. In NEMA it is closely related to (and an integral part of) the EIA process and as such not a separate instrument.	When developing a more flexible EIA system, the role of exemptions must be investigated. The use of exemptions in the SEMAs must also be investigated to determine if it should be considered a separate instrument.	Low	Mintech Working Groups 5 (DFFE, and other environmental authorities)
19	Section 24G Directives	Regulatory instruments in terms of section 24G of NEMA	Directives issued in terms of section 24G(1) of NEMA is a project level compliance instrument. In term of a section 24G directive a person may/ (and soon to become must once NEMLA is in effect) be directed to cease the activity pending a decision on the application, investigate, evaluate and assess the impact of the activity on the environment, remedy any adverse effects, cease, modify or control any act, activity, process or omission causing pollution or environmental degradation, prevent, contain or prevent the movement of pollution eliminate any source of pollution or degradation and compile a report. Section 24G directives are aimed at preventing further harm to the environment whilst the competent authority considers the section 24G application for environmental		Effectively used	Low	Mintech Working Groups 5 (DFFE, and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
			authorisation for activities that commenced unlawfully, which activities are in progress.				
20	Environmental Management Frameworks	Strategic or planning instrument in terms of section 24(5)(bat) and 24(3) of NEMA and EMF Regulations, 2010	EMFs are strategic level assessments and can add value to environmental planning instruments. EMFs – • enable the development of a framework against which positive and negative impacts can be measured of existing and proposed developments; • must be considered in project planning and regulatory decision making where such projects are in or affecting the geographical areas to which those frameworks apply; • promote sustainable development through setting a clear vision and objectives for a geographical area to achieve sustainable outcomes; • promote alignment between sector planning initiatives, especially between SDFs and EMFs to enable cooperative governance; • provide applicants, developers and planners with an indication of areas investigated are considered environmentally appropriate for and compatible or incompatible with proposed development; • provide good and up-to-date information for decision making; • contribute to environmentally sustainable development by anticipating potential impacts and by providing early warnings in respect of thresholds, limits and cumulative impacts; • provide for co-operative governance and improved service delivery; • provide a policy framework aimed at achieving the "Desired State of Environment" or an area investigated; • provide information that can assist in reducing delays and process requirements for project specific EIAs; • inform decision makers of the requirements for environmental assessment; • provide a strategic context within which environmental assessments should be done; • influence strategic level development plans (particularly at municipal level) by informing them on sensitive environmental attributes in the area of influence, the appropriate	Concerns have been raised that EMFs do not provide adequate guidance to project level planning and EIA processes. EMFs are often referred to as an option to "do away" with the need for EIAs and EAs. This is an inappropriate and limited view of EMFs. Quality of information often poor or inadequate to support effective EMF development. There is often poor alignment between EMFs and SDFs, resulting in poor guidance to regulatory processes and the exacerbation of criticism against EIA processes and conflicts between authorities.	Implementation strategy to improve on EMF practices. Need to prioritise the development of EMF standards for decision making Technical training sessions on EMF development and implementation. A strategy should be developed to assist with securing funding for EMF development as well as the review of existing EMFs. Include where necessary new data collection at fine scale where this does not exist. To do this more definitive land use guidelines are required and spatial data must be fine scale. Capacity building and awareness raising should be done to avoid EMFs being regarded as "doing away with EIAs". EMF should be undertaken at an appropriate scale to inform decision making. EMF needs to be aligned with Land Use Planning levels rather than SDF levels. EMF Regulations provide more detailed requirements in terms of development, content and adoption, of EMFs. The review of the effectiveness of EMFs should improve: • The level of guidance given to EIA processes. • Quality and scale off information used to provide effective guidance to EIAs. • Poor alignment with SDFs, resulting in poor guidance to EIA processes and the exacerbation of EIA /regulatory process conflicts and conflicts between authorities. • The importance of environmental planning.	High	Mintech Working Group 5 [DFFE and other environmental authorities, Metros and District Municipalities (DMs)]

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			current and future use of resources (including land use), environmental management guidance, etc.; • promote cooperative governance; • allow for the improvement of co-management of activities (how land is used) and land use management; • improve capacity and awareness of sustainable development of all state and non-state stakeholders. EMFs can provide guidance to both planned developments and to existing development (and use of resources).				
21	Environmental Implementation Plans (EIP) and Environmental Management Plans (EMP)	Strategic instruments in terms of section 11 of NEMA	Chapter 3 of NEMA provides for national departments exercising functions which may affect the environment and every provincial department responsible for environmental affairs to prepare EIPs, as well as state departments exercising functions involving the management of the environment, to compile EMPs. This is a crucial environmental management instrument for provinces for purposes of their performance management support and oversight role to municipalities in terms of section 16(4) of NEMA. EIPs and EMPs facilitates cooperation between organs of state. EIPs and EMPs are crucial in ensuring that policies and plans are sustainability focused.	There are concerns that EIPs and EMPs are not effectively implemented. There are differing views regarding the value of EIPs and EMPs. Concerns have been expressed that follow up on implementation of EIPs and EMPs are poor. There are concerns that EIPs and EMPs are duplicating reporting mechanisms in terms of other intergovernmental reporting mechanisms. There is a need to strengthen the role of EIPs and EMPs in setting sustainability objectives that can be cascaded down to local EMF and SDF level (linked to the oversight role contained in section 16(4) of NEMA).	There is a need to acknowledge, retain and strengthen the environmental performance management requirement related to EIPs, especially related to the provincial support and oversight role towards municipalities in terms of section 16(4) of NEMA. Improve quality and implementation of EIPs and EMPs. These documents must play a lead role in the National Development Plan imperative for a sustainable low-carbon development path for South Africa. EIPs and EMPs must contribute to an effective use/flow of information to ensure continuous improved environmental performance. EIPs and EMPs should be used to set national and provincial sustainability objectives that can be cascaded further down to other plans and programmes (including EMFs). Specific law (and/or policy) reform initiatives be identified to strengthen the environmental planning mandate in section16 of NEMA. Increase the use of State of Environment Outlook Report information in setting of sustainability objectives in EIPs and EMPs plans. There is an opportunity for improved integration and alignment between the Provincial SDF and EIPs and EMPs to improve aligned guidance being provided to lower order plans and programmes (i.e. EMFs and municipal SDFs).	High	Mintech Working Group 3 (DFFE and other environmental authorities)
22	State of Environmental Outlook Reporting	Strategic instrument in terms of section 16A of NEMA	A strategic environmental reporting and performance management instrument. Used to identify trends to be addressed to improve environmental performance at all spheres of government and society.	Must be used to set sustainability objectives in EIPs, EMPs, Medium term strategic framework (MTSF) and strategic plans.	Need to increase the use of Sate of environment (SoE) Outlook Report (SEOR) information in setting of sustainability objectives. The setting of sustainability objectives should flow from the SEOR and the performance against such objectives should be reported in the SEOR. This work should be integrated with the EIP and EMP tasks highlighted in 21 above, especially the setting of sustainability objectives.	Low	Mintech Working Group 3 (DFFE and other environmental authorities)

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23	Strategic Environmental Assessment	Strategic instrument in terms of section 24(5)(bA)s of NEMA and in terms of Chapter 3 of SPLUMA (the list will soon be moved to the definitions in NEMA and MEMLA)	SEAs are strategic environmental assessment and environmental planning instruments SEAs are pro-active and informs development proposals and are used to assess the effect of the existing environmental and socio-economic conditions on development opportunities and constraints. It relates to areas, regions or sectors of development. Enables the development of a framework against which positive and negative impacts can be measured. A process aimed at the development of a sustainability framework to inform continuous decision-making over a period of time. It is focused on maintaining a chosen level of environmental quality and socio-economic conditions (e.g. through the identification of sustainability objectives and limits of acceptable change). Provides a wide perspective and includes a low level of detail to provide a vision and overall framework. Often referred to as a process that integrates sustainability considerations into the formulation, assessment and implementation of policies, plans and programmes. Typically focuses on the opportunities and constraints that the environment provides for future development as well as the effect of a policy, plan or programme on the environment. It offers flexibility in terms of IEM. Depending on the context it was developed for, SEA has the ability to proactively inform developments (during planning). It can also reduce the number of specific types of developments that need to be subjected to the full EIA process, e.g. the REDZ SEA resulted in many developments not having to all follow S&EIR anymore but BA and the consolidation of developments into streamlined processes.	Duplication of processes. SEA is not useful as standalone instrument as it cannot cover finer scale variation. There are no regulations to inform the content and implementation of SEAs. This has resulted in diverse practices (different uses of SEAs) – a positive characteristic, however; the lack of a regulatory framework also resulted in SEAs often being poorly implemented through decision making. Arguably, the lack of legislation to support its implementation has resulted in the focus on SEA processes rather than the implementation of the outcomes and outputs thereof. It is also an adaptable and multi-faceted tool that may be applied in a variety of circumstances and situations. The current diversity of SEA practices will make it difficult for SEAs to be regulated or confined to set processes. It is not suitable for small scale projects and it is more efficient where only one type of activity/development sector is assessed (e.g. the identification of renewable energy development zones). The implementation of SEAs that are initiated for geographical areas with diverse land uses, experiences more challenges. Information provided in these types of SEAs is at a broad scale and lacks site specific details. The cost of conducting SEAs is high.	A discussion document should be developed to reflect on – • the strengths and weaknesses of the diversity of SEA practices; • the strengths and weaknesses of the absence of a regulatory framework; and • the implementation and follow-up of SEAs. The discussion document should form the foundation for a strategy for use and implementation of SEAs in South Africa. This will provide clarity on the application of SEA as an instrument and the circumstances in which the various forms of SEA can and should be applied. Education and awareness are needed on the appropriate application and use of this instrument. The option of law reform to improve the implementation of SEA findings should be considered. Funding support for conducting of SEAs (especially at provincial and municipal level) should be considered. SEA must form the basis of (or become an integrated part of) developing an EMF, SDF or other land use plans; it serves as a basis for sustainability appraisal of plans and programmes. Giving effect to NEMA section 24(6) which provides as follows: "An MEC may make regulations in terms of subsection (5) only in respect of listed activities and specified activities of areas in respect of which the MEC is the competent authority". A competent authority therefore does not only implement the EIA Regulations but may make regulations/develop guidelines on how to use other instruments (including SEAs) in decision making.	Low	Mintech Working Group 5 (DFFE and other environmental authorities
24	Voluntary Organisation or Sector-based Instruments	Sector 23A of NEMA allows the Minister to provide guidelines on the development, content and use of voluntary organisation or sector-based instruments, and the circumstances under which such instruments may be submitted to and considered by the Minister. Both NEM: WA and NEM: AQA contain provisions that enable the Minister to draft regulations to incentivise	This is a non-regulatory, market-based instrument (rather than a command and control instrument) to change behaviour and introduce sustainability-led approaches to governance and performance management.	Has only been introduced in 2014 in NEMA and a concerted effort must be made to promote its implementation. Need to provide incentives for the private sector to implement such instruments.	It is recommended that a discussion document be drafted on the implementation of market-based instruments. Capacity building and awareness raising are required to facilitate the increased use of voluntary organisation or sector based instruments (authorities and civil society).	Medium	Mintech Working Group 10 (DFFE, Other Authorities) All authorities

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		environmental performance.					
25	NEMA Implementation Guidelines	Non-regulatory instruments	Guidelines developed in terms of Section 24J of NEMA provide support to the implementation of regulatory processes related to listed and specified activities and the implementation, administration and institutional arrangements of regulations made in terms of section 24(5) of NEMA. Guidelines provide guidance to stakeholders on the implementation of pieces of legislation, Regulations, policies, plans and programmes to ensure consistency and efficiency in the application of the said regulatory provisions. Section 23A of NEMA also makes provision for the development of guidelines on the development, content and use of voluntary organisation or sector-based instruments	Standard provision in NEMA and the SEMAs related to the development of guidelines.	Investigate the possibility of rationalizing all the provisions in NEMA and the SEMAs related to the development of guidelines. Capacity building is required to ensure the improved and consistent use of guidelines (authorities and civil society).	Low	Mintech Working Group 10 (DFFE and other environmental authorities) All authorities
26	Bioregional plans	Strategic instrument in terms of section 39 and 40 of NEM: BA and 23A of NEMA and SPLUMA	Bioregional plans are used to - inform land-use planning and decision-making by a range of sectors whose policies and decisions impact on biodiversity; - feed into a range of multi-sectoral planning and assessment processes such as EMFs, SDFs, SEAs and EIAs	Bioregional plans inform the decision-making process of multi-sectoral strategic planning and assessment processes such as EMFs, SDFs, SEAs, and EIAs.	Need to enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments (including bioregional plans) in decision-making as an alternative to environmental impact assessment procedure. Generate case studies of the successful development and implementation of bioregional plans to promote its use. Evaluation of the 2009 Guideline: *Determination of bioregions and the preparation of and publication of bioregional plans and* review if necessary.	High	Mintech Working Group 1 (DFFE and other environmental authorities)
27	Identification of CBAs	Strategic or planning instrument in terms of section 39 of NEM: BA and section 24(5)(bA) of NEMA	CBAs identified and included in maps are used to- - guide project-level regulatory decision-making about where best to locate development. - inform strategic land-use planning, environmental assessment and authorisations, and natural resource management, by a range of sectors whose policies and decisions impact on biodiversity. The above reflects on CBAs /BSPs being used in – - reactive decision making, such as environmental impact assessment (EIA), agricultural land-use decisions, water-use licensing and other development control decisions through the SPLUMA or other provincial planning legislation; - proactive forward planning, such as IDPs, SDFs, EMFs and Zoning Schemes.	No development framework on information requirements to be included when developing this as an instrument for common practice. Issues in identification and prioritization of CBAs/BSPs noted in some provinces due to capacity issues; knowledge and expertise on the subject.	Need to enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments (including CBAs in decision-making as an alternative to environmental impact assessment procedureI Capacity building is required (authorities and civil society).	High	Mintech Working Groups 1 and 5 (DFFE and other environmental authorities)
28	Biodiversity Offsets Guideline	This is a specific example of a guideline as a non-regulatory instrument in terms of section 24 J of NEMA and section 39 of NEM: BA (as an integral part of the EIA process)	Biodiversity offsets are not used as stand-alone instruments, but as an integral part of regulatory instruments. It is used to - provide" critical information including "red flags" and "trade-offs environmental assessment practitioners (EAPs), specialists in	Biodiversity offsets and ecological compensation are often inappropriately used. It must never be used as a reason why a particular EA application should be approved. Also, biodiversity offsets should only be required when a proposed listed or specified activity, or activities, is/are	More guidance is needed to ensure a consistent approach to the identification, development and implementation of biodiversity offsets as part of regulatory processes. Capacity building is required to ensure the consistent use of biodiversity offsets (authorities and civil society).	High	Mintech Working Groups 1, 5 and 10 (DFFE and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
			environmental assessment processes, commenting authorities, statutory conservation authorities, interested and affected parties (I&APs), applicants for EA (or other authorisations or licences) and financial institutions funding proposed projects that require EA; - to encourage more rigorous consideration of feasible development alternatives which avoid and minimise negative impacts on biodiversity, to help remedy and counterbalance the degradation and loss of biodiversity through increased protection and appropriate management; - to comply with biodiversity offset outcomes required in conditions in EAs, Biodiversity Offset Implementation Agreements and EMPrs; - guide regulatory decision-making and the setting of conditions regarding biodiversity offsets.	likely to have residual negative impacts on biodiversity of moderate or high significance. There are no Regulations in place, but a national guideline is in the process of being developed.			
29	Biodiversity Sector Plan	Strategic instruments in terms of section 39 of NEM: BA and section 24(5)(bA) (viii) and (ix) of NEMA	Biodiversity Sector Plans are strategic instruments that are used - - to integrate biodiversity into spatial planning and land management processes; - as an input into planning tools, such as IDPs, SDFs, EMFs, Municipal Open Space Systems and land use schemes - to provide guidance for evaluating EIAs, agricultural land use permits, water use authorizations and development control decisions through land use legislation (e.g. rezoning and subdivision approvals); - to provide input into decisions on the expansion of protected areas through land acquisition by the state and biodiversity stewardship agreements with private or communal landowners.	- Specialist interpretation of the biodiversity features and land cover data is required at the site level. - Cannot be used on its own in land use applications and multi-sectoral planning procedures.	Biodiversity sector plans must be used in combination with site level assessments, for land use change or development applications, particularly for Environmental Impact Assessments, Water Use License Applications/General Authorizations and rezoning/subdivisions.	High	Mintech Working Group 1 (DFFE and other environmental authorities)
30	Protected Area Management Plan (PAMP)	Strategic instruments in terms of section 38-41 of NEM: PAA	The purpose of a PAMP as a strategic instrument is to ensure the protection, conservation and management of protected areas are done in a manner which is consistent with the objectives of NEM: PAA and for the purpose it was declared. As an outcome of the Square Kilometre Array (SKA) SEA, an Integrated Environmental Management Plan (IEMP) was developed. In the IEMP the intention was expressed to declare the SKA area as a protected area in terms of section 38 of NEM: PAA. The IEMP for the SKA was used in an innovative approach as a regulatory instrument to motivate for the exclusion of certain identified activities from requiring an environmental authorisation in terms of section 24(2)(e) of NEMA.	Only Open Standards guideline must be included when developing this instrument for common practice.	More guidance on the intention and use of this instrument must be provided.	Medium	Mintech Working Group 1 (DFFE and other environmental authorities)

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31	Biodiversity Screening Tool	Strategic instrument Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as well as a voluntary sector-based instrument in section 23A NEMA	The Biodiversity Screening Tool is a strategic instrument that supports regulatory decision-making by providing, amongst others, biodiversity information that – - enables decision-makers to avoid biodiversity priority areas; - formalises and standardises the process of planning.	No development framework on information requirements to be included when developing this as an instrument for common practice	Enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments in decision-making as an alternative to environmental authorisation procedures.	High	Mintech Working Groups 1 and 5 (DFFE and other environmental authorities)
32	Norms and Standards for artisanal and small scale miners mining industry OR low risk commodities (a) clay; (b) aggregate; (c) slate; (d) pebbles; (e) diamonds; and (f) sand.	Regulatory instruments in terms of section 24(2)(d) and section 24(10) of NEMA, in line with the provisions of the One Environmental System (OES) in terms of section 50A of NEMA	Standards are developed in terms of section 24(2)(d) of NEMA and are used to provide exclusion from the requirement to obtain an environmental authorisation. As such, Standards are decision-making instruments as an alternative to EIAs and EAs. Norms and Standards for ASM mining industry or low risk commodities is specifically proposed for the mining sector to - - promote or facilitate the mainstreaming of integrated, environmentally sustainable and sound management considerations into business processes, practices, technology and decision-making across the economy; - co-exist with large operators; - ASM operations should be limited to surface and open cast mining; - designate or demarcate certain areas as artisanal or small-scale mining areas; - collaboration between the departments responsible for mining, the environment, and water affairs to undertake feasibility studies on an identified area to determine the risks, potential impacts, water resources before a decision on reservation of an area for ASM is made.	- The regulatory processes provided for under the OES to streamline the licensing requirements in respect of water use, environmental management and mining activities have not had a positive effect on artisinal and small scale miners. - Most artisanal and small scale mining operations are not in a position to comply with the environmental, water use and health and safety requirements. - Cost of doing business for Artisanal and Small Scale Miners.	Where appropriate, and consistent with environmental management principles, DFFE in consultation with DMRE to design accessible policy tools and guidelines that are tailored for the ASM industry including advocacy programmes targeting the artisanal and small-scale miners.	High	Mintech Working Group 5 (DFFE, DMRE and DWS)
33	Voluntary Sector Based Instruments for mining and biodiversity Mining & Biodiversity Guideline & sensitivity map	The Mining & Biodiversity Guideline & sensitivity map is a voluntary sector based and a strategic instrument in terms of section 23A of NEMA	Mining & Biodiversity Guideline & sensitivity map aim to – - foster a strong relationship between biodiversity and mining which will eventually translate into best practice within the mining sector. - point to what biodiversity information and tools exist and how they can be used to integrate biodiversity considerations at every stage of the mining life cycle.	The Guideline does not have any legal standing.	Mining & Biodiversity Guideline & sensitivity map should be used in conjunction with other guiding documents on biodiversity priority areas, integrated environmental management and impact assessment, mitigation, mining and related activities.	Low	Mintech Working Group 1 (DFFE, Other environmental authorities, Metros and DMs)
34	Voluntary Sector Based Instruments for biodiversity land use guidelines	Biodiversity land use guidelines are voluntary sector based and strategic instruments in terms of section 23A of NEMA	The biodiversity land use guidelines aim to – - support municipalities in effectively regulating land use to ensure that biodiversity continues to provide essential ecosystem services to municipal residents;	No development framework or set procedure to develop this as an instrument.	The biodiversity land use guidelines enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments in decision-making as an alternative to environmental authorisation procedures.	Low	Mintech Working Group 1 (DFFE and other environmental authorities)

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			- minimise the multiple threats to biodiversity by increasing the capabilities of authorities and land owners to regulate land use and manage biodiversity in threatened ecosystems at the municipal scale.				
35	Voluntary Sector Based Instruments for the buffering mechanism for World Heritage Sites	The buffering mechanism for World Heritage Sites is both a Voluntary Sector Based Instrument, in terms of section 23A of NEMA, as well as a strategic planning instrument	The buffering mechanism for World Heritage Sites is a Voluntary Sector Based Instrument and a strategic planning instrument. It allows for the development in the Buffer Zones of WHS as long as such activities are deemed not to cause any harm to the Outstanding Universal Value (OUV) of the WHS.	lo development framework or set procedure to develop this as an instrument.	Where there is no need for the delineation of a buffer zone, various buffering mechanisms (including Voluntary Sector Based Instruments) aimed at protecting the Outstanding Universal Value of the Site can be utilised.	Medium	Mintech Working Group 1 (DFFE, Other Authorities)
36	Spatial biodiversity plans	Spatial Biodiversity Plans are strategic instruments that are developed in terms of Chapter 4 of NEM: BA Bill (2021)	Spatial Biodiversity Plans are strategic instruments that support regulatory decision making in the following manner: - identify a set of geographic biodiversity priority areas within the municipality or province, based on the best available science; - provide measures for the management and conservation of biodiversity priority areas; - provide for the monitoring to ensure development is not taking place in biodiversity priority areas.	- Identification, proclamation, designation, declaration of geographical areas, zones, products, resources for protection, including, process, amendment/extension of such. - Marking of boundaries.	There is a need to provide guidance on the following: -Prescribing what development may take place within the different geographic biodiversity priority areas to regulate different listed and specified activities; -enabling, as appropriate, the use of spatial tools, norms and standards and environmental management instruments in decision-making in support of, or as an alternative to environmental impact assessment procedure. d -providing for exemptions under certain circumstances.	Medium	Mintech Working Group 1 (DFFE and other environmental authorities)
37	Threatened Ecosystems identification	Strategic tools in terms of section 52(1)(a) of NEM: BA, as well as a Voluntary Sector Based Instrument in terms of section 23A of NEMA	The purpose of the identification and mapping of threatened ecosystems is: - To inform regulatory decision making, especially environmental authorisation applications, in terms of NEMA and EIA Regulations. - Inform planning initiatives – this is linked to the requirement in the NEM: BA for listed ecosystems to be taken into account in municipal IDPs and SDFs.	- No development framework on information requirements to be included when developing this as an instrument.	Threatened Ecosystem Identification should not be used as an instrument on its own but is key informant to other instruments Enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments in decision-making as an alternative to environmental authorisation procedures.	Low	Mintech Working Group 1 (DFFE and other environmental authorities)
38	National Biodiversity Framework	Strategic instrument in terms of section 39 of NEM: BA Bill (2021)	- Integration with an environmental implementation or environmental management plan in terms of Chapter 3 of the National Environmental Management Act. - Integration with an integrated development plan. - Integration with spatial development framework in terms of legislation regulating land-use management, land development and spatial planning - Align with the provisions relating to any listed ecosystem or listed species.	- Feasibility, scope, and timeframes for the preparation of the tool (co-ordination and alignment with biodiversity planning tool). - Lack of process and procedure.	Enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments in decision-making as an alternative to environmental authorisation procedures.	Medium	Mintech Working Group 1 (DFFE and other environmental authorities)
39	Identification of Ecological Support Areas (ESAs)	Strategic or planning instrument in terms of section 24(5)(bA) of NEMA	- Guide decision-making about where best to locate development. - Inform land-use planning, environmental assessment and authorisations, and natural resource management, by a range of sectors whose policies and decisions impact on biodiversity.	- No development framework or set procedure to develop this as an instrument.	Enable, as appropriate, the use of spatial tools, norms and standards and environmental management instruments in decision-making as an alternative to environmental authorisation procedures.	Medium	Mintech Working Group 1 (DFFE and other environmental authorities)

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
40	Compartment Mapping	Non-regulatory instruments	- Allows registered users to improve the database on protected areas. Users can recommend corrections and additions to the database directly on a detailed interactive map. - Shows various types of protected areas and conservation areas in South Africa. Users can generate reports and statistics.	Need for regular site updates		Low	DFFE
41	Atmospheric Emission Licence	Regulatory instrument in terms of section 21, 22 and/or 37 of NEM:AQA	• The Atmospheric Emission Licence process constitutes a project level environmental assessment process with the purpose of informing decision making on applications for atmospheric emission licenses: • To achieve industrial activities with less pollution/emissions or that are compliant with standards through setting of quality operational conditions. • Adoption of best practicable environmental options as informed by best available techniques.	The potential to achieve atmospheric pollution reduction through AELs is often low as Implementers / AEL Authorities' approach using this tool is weak in a sense that the conditions set for operation in most cases are poor, and not influential to industries to improve their emissions.	Technical training sessions on categories of listed activities (on how to determine these). In addition, conditions of AEL need to be focused beyond the requirement to comply with Minimum Emissions Standards (MES).	High	Mintech Working Group 2 (DFFE and other licencing authorities)
				The Regulators lack skills in certain processes to set quality conditions/poor implementation practices.	Authorities to have staff development and retention policies.	Medium	DFFE, Provinces, Metros and District Municipalities
				Section 21 NEMAQA Listing of categories not clearly defined: leading to listing of activities that ought not to be listed and open the door to litigation risk.	There is a need to rationalise the air quality activities listed in terms of section 21 of NEM: AQA. The section 21 Categories need to be clearly defined and descriptions of listed activities made clear (including the intentions). Delisting of some activities that do not have significant impact and manage them in terms of section 23 (similar to the way Norms and Standards are used in other SEMAs).	High	DFFE, Provinces, Metros and DMs
				Technologies used at some industries are very old (50 years or more) and there is an urgent need to improve the technologies.	There is a requirement for improved compliance monitoring and enforcement: Postponement provisions are being utilized as a transition to replace old technology: What happens in the mid and long term? Compliance with MES is required through enforcement.	Medium	Mintech Working Group 2 and 4
42	Stack Emission Monitoring Reports	Regulatory: in terms of AEL reporting requirement [section 43 (1) of the NEM: AQA]	• Assess the performance and status of an industry regarding whether its emissions are compliant with general ambient standards in order to determine priority pollutants at the ambient station. • Determination of emissions from facilities which can be used to assess the impact on the receiving environment.	Non-submission of reports by industries.	Strengthening of enforcement to enable timeous submission of reports.	High	Mintech Working Groups 2 and 4 (EMIs)
				Inability of some regulators to effectively interpret the reports.	Training of staff on full interpretation of stack monitoring reports and their importance on air quality.	High	Mintech Working Group 2 (DFFE and provinces)
				Challenges regarding differentiation of AEL compliance conditions for improvement and National Atmospheric Emission Inventory System (NAEIS) reporting for Emission Inventory.	AEL conditions to be crafted in such a manner that there is no confusion between NAEIS reporting requirement and impact management reporting requirement.	High	DFFE, Provinces, Metros and DMs (Licensing Authorities)
43	National Air Quality Standards	Regulatory: instrument in terms of section 9(1) of the NEM: AQA	• The Minister may identify substances for which national ambient air quality standards must be set. • The Minister may also establish national standards for emissions	Continuous air quality monitoring (including dust fall monitoring) is costly and use thereof is complex.	Investigation of cost-effective methods for air quality monitoring is needed.	Medium	Mintech Working Group 2 (DFFE, Provinces, Metros and DMs (Licensing Authorities)

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			from point, non-point or mobile sources. Ambient air quality monitoring provides information on ambient air quality in compliance to the standards.				
44	Provincial Air Quality Standards	Regulatory: instrument in terms of section 10 of the NEM: AQA	• The MEC may identify substances for which national ambient air quality standards must be set • The MEC may also establish standards for emissions from point, non-point or mobile sources. • Ambient air quality monitoring provides information on ambient air quality in compliance to the standards	Continuous air quality monitoring (including dust fall monitoring) is costly and use thereof is complex.	Investigation of cost-effective methods for air quality monitoring is needed.	Medium	Mintech Working Group 2 (DFFE, Provinces, Metros and DMs) (Licensing Authorities)
45	Atmospheric Impact Reports	Regulatory: in terms of section 30 of the NEM: AQA.	An Atmospheric Impact Report can be requested by an Air Quality Official to assess the impact of existing and proposed activities.	Not fully utilised because of capacity to interpret reports	Capacity building on the compilation, review and interpretation of Atmospheric Impact Reports	High	Mintech Working Group 2 (DFFE, Provinces)
46	Priority Areas Air Quality Management Plans (AQMPs) and other AQMPs	Regulatory: in terms of section 30 of the NEM: AQA.	Provide knowledge on existing emitters and management of future developments.	Poorly developed AQMPs with just information on air quality, having no clear activities to be implemented.	Development of improved AQMPs which are simple, activity bound and building towards targets achievements.	Medium	DFFE
				Mostly utilised as a guideline and not a legislative document for industries.	Commitment from industries on recommendations made in the AQMP is needed.	Medium	DFFE, Industries
				Huge number of entities are required to develop AQMPs, leading to over regulation and renders implementation and monitoring difficult.	Limit AQMP development to strategic entities (e.g. limit to district level rather than at municipal level).	Medium	DFFE
47	Emission Reduction Programmes	Regulatory: in terms of section 30 of the AQA.	• Air quality improvement programmes from community side like "Alternative energy to fossil fuel". • Reduction programmes from listed activity side like change of raw materials, abatement equipment, etc.	Complexity of sources emitting to the atmosphere.	Public participation on alternative energy to communities and NGOs	Medium	Licensing Authorities, communities, industry
				Green or clean energy expensive and scarce.	Implement cost-effective and practical energy efficiency measures.	Medium	Industry
				Poor follow ups by Authorities to demand reduction programmes from non-compliant industries with MES.	Authorities to demand non-compliant industries to draft and implement air pollution reduction programmes.	High	Licensing Authorities
48	Identification of Air Quality Buffer Zones	Non-regulatory (Currently not defined in the NEM: AQA)	Proper zoning of industries in relation to residential areas for prevention of pollution such as noise and air pollution, to a certain extent.	Non availability of land or space.	New land development planning to consider appropriate zoning.	Medium	Metros, District and Local Municipalities
				Zones are not distant enough to allow pollution reduction.	Abatement equipment usage by industries and regular maintenance and repairs at all times.	High	Industries
				Currently not identified in the NEM: AQA	Buffer zones may be clarified/defined in by-laws, and guidance to be provided in the Model By-laws (guideline) including assistance in the development of by-laws for municipalities that may not have such.	Medium	DFFE, Provinces, Metros and DMs
49	Cost Benefit Analysis	Strategic	The benefits and costs of having certain industrial expansion or throughput increase or emission increments need to be weighed against the costs to human health. The use of the cost benefits analysis needs to be applied to certain situations in air quality especially where exceedances of air quality thresholds are predicted.	The systems by which this can be done in air quality is not established nationally	Making use of globally available software that could be tailor-made to fit the country's unique circumstances	Low	Licensing Authorities, communities, industry, research institutions
				Complex, time consuming and may be costly	Could be implemented through a partnership approach, particularly when used for strategic programmes such as Priory Area AQMP development and implementation	Low	Licensing Authorities, communities, industry, research institutions

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50	Definition of waste	Regulatory	Prevent misunderstandings and differences in interpretation of the definition of waste with regards to the terms of the National Waste Management Strategy (NWMS) that promotes re-use, recycling, recovery and treatment of waste as alternatives to disposal.	Uncertainty on the definition of waste as well as the ArcelorMittal SA Van Der Bijl ruling, has led to differences in interpretation of the definition of waste.	Definition of waste to be amended	High	DFFE Directorate: Licensing Directorate: Policy
51	National and Provincial Waste Norms and Standards: · Assessment of waste for landfill disposal · Domestic waste collection · Disposal of waste to landfill · Remediation of contaminated land and soil quality · Storage of waste · Extraction, flaring and recovery of landfill gas · Recovery of motor vehicles · Sorting, shredding, grinding, crushing, screening or bailing of general waste	Regulatory	Sections 7, 8 & 9 of NEM: WA Makes provision for the development of national, provincial and local norms and standards. The Minister must, by notice in the Gazette, set national norms and standards for the- (a) classification of waste; (b) planning for and provision of waste management services; and (c) storage, treatment and disposal of waste, including the planning and operation of waste treatment and waste disposal facilities. The Minister, or the relevant MEC, within his or her jurisdiction, may, by notice in the Gazette, set national norms and standards for- (a) the minimisation, re-use, recycling and recovery of waste, including the separation of waste at the point of generation; (b) extended producer responsibility; (c) the regionalisation of waste management services; and (d) the remediation of contaminated land and soil quality. Norms and standards assist through the reduction of the administrative and financial burden on proponents associated with obtaining a WML. The long legislative timeframes (300 days) and high cost (e.g. application fee, cost of EAP and specialists, etc.) is prohibitive to the entry of small, medium and micro enterprises (SMMEs) into the waste management space. Implementation of the N&S allow smaller facilities to operate without increased risk of environmental impacts.	Follow up on the compliance of registered facilities with the requirements of the N&S is limited. This situation may allow for increased risk of environmental impacts due to facilities not implementing the requirements of the relevant N&S. Transitional arrangements of some N&S (e.g. N&S for storage of waste) still bind facilities to the conditions of their WML for storage of waste authorised as a listed activity prior to the commencement of the N&S.	Including the monitoring and evaluation (M&E) of compliance with the requirements of the N&S into the APP of the Department. Providing support to registered facilities to enable them to comply with the requirements of the N&S. The WMLs of these facilities need to be reviewed and allowed to lapse (if WML is only for storage of waste) in order for them to register and comply with the requirements of the N&S.	High	DFFE Directorate: Licensing
52	Section 14 of NEM: WA Priority waste declaration Section 15 of	Regulatory	To declare a type of waste as priority waste if it poses a threat to health, well-being or environment. Instrument should be implemented to manage the impact of a specific waste type. Furthermore, the instrument should be used to implement	Possible removal of waste from priority waste list under certain conditions. Potential for extreme difficulty in managing the declaration of priority waste, especially since it involves products that may lead to the	Guidelines for Monitoring and Evaluation (M & E) should be published and implemented stringently. At this stage the solution is to use other instruments which may be easier to implement, e.g. Extended Producer Responsibility (EPR) (section 18). More thought and research need to go into the viability of section 14 and 15.	Low Low	DFFE CD: HWM&L and CD: Policy, Monitoring and Evaluation DFFE CD: HWM&L and CD: Policy, Monitoring and Evaluation

	Instrument or tool name	Instrument classification: • Regulatory • Strategic • Non-Regulatory	Description of the use and application of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Gaps and limitations in the use and implementation of the instrument (Based on the views expressed by participating authorities and is not based on scientific evidence or research)	Interventions, solutions or innovation to address gaps and limitations (The information conveyed in this column is based on preliminary observations based on participating authorities' views, and must, as a next step, be further investigated based on current research)	Prioritization of intervention and innovation	Allocation of responsibilities (i.e. lead authority to implement intervention)
	NEM: WA Priority waste declaration	Non-regulatory	integrated waste management e.g. the compilation of generic EMPs. Declaration of priority waste constitutes a good tool to manage the impact of a specific waste that should be used to implement integrated waste management.	generation of a priority waste.			
53	Section 16(3) and (4) of NEM: WA General duty	Regulatory	This section places an obligation on producers of products on the market to identify the waste that could be generated from their product along with the responsibility of developing measures to deal with that waste.	The NEM: WA does not regulate products but rather the waste generated and section 16 goes beyond the waste and deals with products.	Utilise section 18 which is more holistic and then can push producers to design for maximum recyclability of their products to prevent waste from being generated. Create systems and tools (e.g. N&S) to monitor the impacts of the waste management activities on the environment.	Low	DFFE CD: Policy, Monitoring and Evaluation
	Notices on the reduction, re-use, recycling and recovery of waste	Regulatory	Section 17 of NEM: WA requires that everyone consider the reduction, re-use, recycling and recovery of waste, and the Minister to issue notices in this regard The outcome is to reduce the amount of waste going to landfill and is linked to EPR.	Efforts toward recycling is being hampered due to the high costs involved in establishing recycling facilities. Insufficient research available to inform efforts towards the reduction, re-use, recycling and recovery in the South African context.	More research is required to address the reduction, re-use, recycling and recovery of waste in the South African context. Research is also required to find more cost-effective technologies for recycling and recovery. Development of markets for recycled material will also address this issue.	Low	DFFE CD: Policy, Monitoring and Evaluation
54	Extended Producer Responsibility Notices	Regulatory	Section 18 of NEM: WA makes provision for the issuing of Notices on the implementation of Extended Producer Responsibilities. The purposed of EPR is to ensure effective and efficient management of end-of-life products and to encourage and enable the implementation of the circular economy. EPR also has the potential to reduce the amount of waste going to landfill, through recycling and re-use activities.	Implementation of the EPR Regulations (GN 1184 of 05 November 2020) is currently limited to the following sectors: · Electrical and Electronic Equipment sector· - Lighting sector · Paper, Packaging and Some Single Use Products While voluntary schemes have been operating for a while in the country, there is not sufficient experience from a mandatory point of view. This is a new field and questions and concerns are raised weekly on implementation. Implementing EPR may not deal with all product types, which may be a limitation and not fully achieve the target of diversion of waste from landfill.	Wide application of EPR to achieve targets of diversion of waste as well as for producers to accept responsibility for their products.	High	DFFE CWM Branch. Depending on the waste streams targeted, it could be CD: HWML or CD: IWM or CD: Chemicals Management and CD: Policy co-ordinates.
55	Identification of Waste Management Activities	Regulatory	Section 19 allows for the Minister to declare listed waste management activities and if these activities are triggered a waste management licence must be obtained. They provide for the control and management of certain waste and processes. Section 19(3) of NEM:WA provides for the development of standards that is specific to the Waste Activities that will remove the need to obtain a waste management licence	The identification of waste activities has been used extensively but the regulatory waste management licence process is complex and costly for the proponent that triggers a waste management listed activity. No MEC has taken up this power yet because this can add additional legislative burdens to the waste management industry. Cost of WML applications in terms of EAP appointment is prohibitive for many facilities, especially SMMEs.	Regulation to manage the cost of EAPs is required. Legal implications of this and mandate does not only lie with DFFE, but other legislation must also be considered. More use of norms and standards will alleviate this problem.	Low	DFFE Directorate: Licensing, CD: Law Reform

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56	Norms and standards for specific Waste Management Activities	Regulatory	Section 19(3) of NEM:WA provides for the development of standards that is specific to the Waste Activities that will remove the need to obtain a waste management licence	Cost of WML applications in terms of EAP appointment is prohibitive for many facilities, especially SMMEs.	More use of norms and standards will alleviate this problem.	Low	DFFE Directorate: Licensing, CD: Law Reform
57	Section 21 of NEM: WA General requirements for the storage of waste	Regulatory	Section 21 of NEM: WA make provision for general requirements (duty of care) for the storage of waste to reduce the requirement of a WML for the storage of waste.	This is limited in terms of the requirements, however this has been addressed in the N&S for storage of waste.	Implementation of the N&S for the Storage of Waste under Category C of the listed waste management activities (GN 921) addresses this, with a WML no longer being necessary for the storage of waste, except if the waste is stored in a lagoon.	High	DFFE Directorate: Licensing
58	Industry Waste Management Plans (IWMP)	Industry Waste Management Plans are regulatory instruments provided for in Sections 28, 29, 30, 31, 32 & 33 of NEM: WA	Improve the accountability of waste industry for the impacts associated with their waste management. Section 28 - Minister or MEC can call for mandatory IWMPS Section 29 - Preparation of industry waste management plans by organs of state Section 30 - Contents of industry waste management plans Section 31 - Notification of industry waste management plan Section 32 - Consideration of industry waste management plans Section 33 - Specification of measures to be taken	Although provision was made for an MEC to exercise the power to call for IWMPs, amendment to this make it virtually impossible for MECs to execute the power. Complex process – so far only one IWMP was developed and approved for waste tyres. The Minister called for 4 waste streams to develop plans but stopped the process of approval. Unfortunately, the section 28 plans only allow for the funds to be administered by government and this is not supported by industry. Neither is it a function of DFFE to collect money and disburse for collection, recycling, etc. Government should not take on the role of industry which is a significant flaw of this process.	Government collecting the fees through National Treasury, may cause difficulty with dispersing of the funds back into recycling, etc. Required intervention to address this: • Training of officials; • Law reform required to allow provinces to also use this tool; • Explanatory document required; Change manner of implementation of IWMP's as the tool is good, but implementation may be problematic if it is government centric.	Low	DFFE Branch: CWM
59	Contaminated Land identification notice, contaminated land assessments and contaminated land remediation orders	Regulatory instruments: Contaminated Land identification notice, contaminated land assessments and contaminated land remediation orders are regulatory instruments provided for in Part 8 of NEM: WA, Sections 35 - 41	Remediation orders are extensively utilised to eliminate the need to apply for waste management licences to remediate contaminated land.	The process is not punitive at this stage and so if polluters come forward and acknowledge their responsibility in terms of clean up, then no punitive action is taken against them.	If notification is received from the public in terms of whistleblowing against companies that pollute, or have polluted in the past, then section 36(6) can be used to ensure that the responsible party cleans up contaminated land.	High	DFFE Directorate: Land Remediation
60	Recognition programmes in waste management	Non-Regulatory	In terms of section 42 of the NEM:WA, recognition pogrammes in the waste management industry can be implemented for different sectors in terms of waste management listed activities performed (e.g. recycling, recovery and re-use together as well as treatment). Can be used as motivation for compliance with existing regulatory requirements that could allow for growth of especially SMMEs.	Limiting factors to the successful implementation of recognition programmes include: Poor reporting and monitoring to establish a baseline for criteria to be recognised. Disinterest from the sector.	Guidelines/Programme to be implemented as part of advertising of the programme to communicate requirements for eligibility. Incentives to be identified and budgeted for, e.g. free advertising, monetary contribution to facility, etc.	Low	DFFE CWM Branch.
61	Waste management application process	Regulatory	Section 45 to 51 of the NEM: WA sets out the regulatory procedures for applications for a waste management licence (WML)	Existing instruments that are extensively used	???	Low	DFFE CWM Branch.
62	Notices for the provision of waste management information	Non-regulatory	In terms of section 63 the Minister may, by notice in the Gazette or in writing, require any person to provide, within a reasonable time or on a regular basis, any data, information, documents, samples or materials to the Minister that are reasonably required for the purposes of the national waste information system.	????	?????	Low	DFFE CWM Branch.
63	Waste Management Information System	Strategic	Section 60 to 64 provides for the establishment of an information system for waste management. Accurate information is required to improve the management of waste in the sector through improved monitoring and evaluation.	The South African Waste Information System (SAWIS) is not geared to allow external people/licence holders to log in and upload information. Hence information on SAWIS is not up to date or accurate and does not allow for timeous policy shifts by the Department.	A process to upgrade SAWIS is underway. Industry and licence holders to be encouraged to submit their information to the DFFE that forms part of the conditions in their WML or N&S registrations. Increased compliance monitoring and enforcement on this matter is required.	High	DFFE CD: Policy, M&E

Table 3: Summary of Regulatory IEM Instruments to be prioritised

Instrument or tool name	Prioritization of intervention and innovation	Allocation of Responsibilities (i.e. lead authority to implement intervention)
Environmental Impact Assessments	High	DFFE and all other competent authorities (Mintech WG 5)
Environmental Management Frameworks	High	Mintech Working Group 5 [DFFE and other environmental authorities, Metros and District Municipalities (DMs)]
Environmental Management Programmes – in terms of s24(2)(e) of NEMA	High	DFFE and all other competent authorities (Mintech WG 5)
Norms and Standards	High	DFFE, Other Authorities (Mintech WG 5)
Instrument in terms of section 24(2)(c) of NEMA	High	DFFE and all other competent authorities (Mintech WG 5)
Instrument in terms of section 24(2)(e) of NEMA	High	DFFE and all other competent authorities (Mintech WG 5)
Atmospheric Emissions License Protocol	High	Mintech Working Group 1 (DFFE and other licencing authorities)
Waste Extended Producer Responsibility Notices	High	DFFE CWM Branch. Depending on the waste streams targeted, it could be CD: HWML or CD: IWM or CD: Chemicals Management and CD: Policy co-ordinates.
Contaminated Land Identification Notice, Contaminated Land Assessments and Contaminated Land Remediation Orders	High	DFFE Directorate: Land Remediation
Exclusion of Waste Stream on a Portion of a Waste Stream from the Definition of Waste	High	DFFE Directorate: Licensing
Establishment of coastal management lines	High	National (DFFE) and Provincial
Environmental Protocols	Medium	Mintech Working Group 5 (DFFE and other environmental authorities)
Environmental Management Programmes (EMPrs) – in terms of s24N of NEMA and as prescribed in Regulations	Medium	Mintech Working Group 5 (DFFE and other environmental authorities
Model Environmental Management By-Laws	Medium	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities
Sustainability Appraisals	Medium	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities
Priority Areas Air Quality Management Plans	Medium	DFFE
Environmental Risk Assessments (Risk Assessments)	Low	Mintech Working Group 5 (DFFE and other environmental authorities)
Environmental Feasibility Assessments	Low	DFFE (Integrated Environmental Management Systems and Tools) and other environmental authorities
Section 14 and 15 of NEM:WA	Low	DFFE CD: HWM&L and CD: Policy, Monitoring and Evaluation
Notices on the Waste Reduction, Re-Use, Recycling and Recovery	Low	DFFE CD: Policy, Monitoring and Evaluation
Industry Waste Management Plans	Low	DFFE Branch: CWM
Waste Management Application Process	Low	DFFE CWM Branch.

Table 4: IEM Instruments' implementation plan:

Proposed intervention	Name of the instrument	Type of the instrument		Motivation	Expected outcome of the intervention	Implementation plan of the intervention	Time-frame
Need to introduce a flexible screening process to create more options related to the level and type of assessment that is required during an EIA process. In other words, there is a need to use screening to improve use of flexibility, discretion and differentiation in the EIA process. Information and timeframe requirements to be determined by flexible screening process.	EIA	Regulatory		This was an outcome of the EIA Review Study 2019 to be implemented. In addition: Time constraints of the EIA process sometimes hamper the substantive effectiveness of EIA processes (i.e. the ability to achieve sustainable development outcomes). The strong focus in South Africa on procedural efficiency (i.e. time and cost) is eroding the substantive effectiveness of EIAs (i.e. achieving sustainability outcomes). The EIA process has fixed, inflexible content and procedural requirements. This results in an inappropriate 'one size fits all' approach. Listed activities do not respond to (differentiate between) different sensitivities of the receiving environment. Regulatory screening (BA or S&EIR) is too robust to cater for differentiation /flexibility in the level and type of assessment to be followed. Lack of flexibility to change the EIA process to be followed. Timeframes do not respond to complexity and sensitivity.	Flexible EIA process through the introduction of a flexible screening process - this will require law reform	Implementation of a law reform process through a discussion document, internal consultation, draft legislation, consultation and adoption through Mintech, public consultation and final gazetting of revised legislation (EIA Regulations)	2024/25-2026/27 (18-24 months)
Implementation strategy to improve EMF practices	Environmental Management Frameworks (EMFs)	Strategic or planning instrument in terms of section 24(5)(bA) and 24(3) of NEMA and EMF Regulations, 2010		EMFs are strategic level assessments/planning instruments that - • enable the development of a framework against which positive and negative impacts can be measured of existing and proposed developments; • must be considered in project planning and regulatory decision making; • promote sustainable development through setting a clear vision and objectives for a geographical area to achieve sustainable outcomes; • promote alignment between sector planning initiatives, especially between SDFs and EMFs to enable cooperative governance; • provide stakeholders with an indication of areas considered environmentally appropriate for and compatible or incompatible for developments; • contribute to environmentally sustainable development by anticipating potential impacts and by providing early warnings in respect of thresholds, limits and cumulative impacts; • provide for co-operative governance and improved service delivery; • provide a policy framework aimed at achieving the "Desired State of Environment" or an area investigated; • provide information that can assist in reducing delays and process requirements for EIAs; • provide a strategic context within which environmental assessments should be done; • influence strategic level development plans (particularly at municipal level)	Improved used of EMFS and the improved EMF practices	Conclusion of the existing Review Study on EMF Practices	2024/25 (4 months)

Proposed intervention	Name of the instrument	Type of the instrument		Motivation	Expected outcome of the intervention	Implementation plan of the intervention	Time-frame
				by informing them on sensitive environmental attributes, environmental management guidance, etc.; • promote cooperative governance; • improve capacity and awareness of sustainable development of all state and non-state stakeholders. EMFs can provide guidance to both planned developments and to existing development (and use of resources).			
Discussion document to clarify the role of EMPrs to resolve the perception of it being used as an assessment and decision-making instrument (e.g. the Generic EMPrs for the Working for Programmes), versus a management /implementation instrument whether as part of the EIA process or any other assessment process (i.e. prerequisites, scope and content).	EMPRs	Regulatory		There is confusion on the apparent / perceived use of EMPrs as it is used as an alternative to EIAs (the Generic EMPRs used as instruments to exclude the requirement for EA). The different uses of EMPrs must be clarified to ensure its appropriate use and appropriate information base for the various possible uses (i.e. prerequisites, scope and content).	Clarity on the different uses of EMPRs and when these different applications will/ can be used	Drafting of a discussion document and awareness raising programme	2026/27 (12 months)
Guidance and clarity on the prerequisites, scope and content of environmental management instruments that can be developed in terms of section 24(2) (e) of NEMA. Improved public and private sector awareness is required on the use of these instruments.	Section 24(2)(e) Environmental instruments	Regulatory		Clarity is needed on when, who and for what purposed environmental instruments in terms of section 24(2)(e) of NEMA can be developed	Increased and consistent use of environmental instruments by different decision making authorities	Drafting of a discussion document and awareness raising programme	2027/28 (12 months)
Guidance and clarity on the prerequisites, scope and content of Norms and Standards as environmental management instruments, developed in terms of sections 24(2)(d) and 24(10) of NEMA. Improved public and private sector awareness is required on the use of these instruments.	Norms and Standards	Regulatory		A standardized practice for norms and standards has not yet been established. This results in long delays as there are differences of opinion regarding the content requirements of such standards and norms (e.g. specialist inputs, third party verification, notification, use of risk aversion, reporting requirements, public notification vs participation, etc.)	Increased and consistent use of Norms and Standards by different decision making authorities	Drafting of a discussion document and awareness raising programme	2028/29 (9 months)
Guidance and clarity on the prerequisites, scope and content of environmental management instruments that can be developed in terms of section 24(2) (c) of NEMA. Improved public and private sector awareness is	Section 24(2)(c) Environmental instruments	Regulatory		Clarity is needed on when, who and for what purposed environmental instruments in terms of section 24(2)(e) of NEMA can be developed	Increased and consistent use of environmental instruments by different decision making authorities	Drafting of a discussion document and awareness raising programme	2029/30 (12 months)

Proposed intervention	Name of the instrument	Type of the instrument		Motivation	Expected outcome of the intervention	Implementation plan of the intervention	Time-frame
required on the use of these instruments.							
Development of protocol, technical standards and additional requirements to manage activities that do not have significant impact that are not listed in both S23 and S21 Lists.	Atmospheric Emission Licence	Regulatory instrument in terms of section 21 and 23 of NEM:AQA		There is a need to develop protocol, technical standards and additional requirements to manage insignificant impact activities that are not listed in S23 and S21 Lists in order to monitor their potential air quality impacts without subjecting them to burdensome regulatory requirements.	Reduction in regulatory burden and promotion of economic growth due to the fact that many facilities would be afforded a space to operate without the stringent requirement for an atmospheric emission licence	Development of protocol, technical standards and additional requirements to manage activities that do not have significant impact that are not listed in both S23 and S21 Lists.	5 years (From 2024/25-2028/29
S18 process for extended producer responsibility for pesticides, lubricating oils and portable batteries	Extended Producer Responsibility	Regulatory		Huge amounts of waste which has recycling value end up on landfill sites. Some of the producers of these products do not have any programmes in place to deal with their products post-consumer use.	Producers must take responsibility for the management of their products post-consumer use, when it becomes waste. This will divert a lot of waste from landfills and preserve airspace	Notices drafted 2021. Notices published for public comment in March 2022. Notices to be amended by October 2022. Notices to be published for implementation in March 2023	As per column before
S18 process for extended producer responsibility for EEE, Lighting, Paper and packaging	Extended Producer Responsibility	Regulatory		Huges amounts of waste which has recycling value end up on landfill sites. Some of the producers of these products do not have any programmes in place to deal with their products post-consumer use.	Producers must take responsibility for the management of their products post-consumer use, when it becomes waste. This will divert a lot of waste from landfills and preserve airspace	EPR Regulations amendment published on 05 May 2021 for implementation	Already in implementation phase
Amendment of the waste definition	NEMWA	Regulatory		There have comments from the private sector that the waste definition is too complicated and that there is some ambiguity in interpretation thereof.	Clarity of what would constitute waste and what the legal requirements would be to manage such waste	The waste definition was amended during the NEMLA 4 process which was signed off by the President on 24 June 2022	Completed
Development of Norms and Standards for Composting of Organic Waste and Norms and Standards for the treatment of Organic waste	N&S	Regulatory		Licensing process has been indicated as being time consuming and costly	Registration with the N&S and ease of compliance. No need for waste management licences in this regard	N&S for composting of organic waste became effective on 11 February 2022. The treatment of organic waste published for implementation on 01 April 2022.	Currently implemented
Exclusion of waste or portion of waste from the definition of Waste	Exclusion regs	Regulatory		Time and costs of WML's are extensive. Exclusion from being considered a waste removes the burden of applying for a licence.	Industry would not have to apply for WMLs for proven beneficial uses of certain waste streams provided they report on the quantities used for those beneficial uses as well as the environmental performance reporting	Waste Exclusion Regulations in place since 2018. Implementation underway with improvements being made to the processes on a regular basis.	Currently implemented
Exemptions from complying with the legislation	S74 of NEM:WA	Regulatory		In certain instances like disease outbreaks, action needs to be taken to prevent spread of such disease and exemption from existing regulatory provisions, like the prohibitions in terms of the WCMR need to be made quickly.	Immediate implementation of activities in order to protect the environment	Already implemented on a case by case basis	Currently implemented