1 Introduction

The term 'environmental framework legislation' seems to be the new 'buzzword' in environmental management and governance discussions. The current trend is to introduce environmental framework legislation in order to ensure 'an integrated, ecosystem-orientated legal regime that permits a holistic view of the ecosystem, of the inter-relationships and inter-actions within it, and of the linkages in environmental stresses.'

Framework legislation aims to define overarching and generic principles in terms of which sectoral-specific legislation is embedded, as well as to enhance co-operative environmental governance amongst fragmented line

** BA Hons MA (UPE), Director Environmental Management Unit, Potchefstroom University for Christian Higher Education.
*** LLB MA LLD (PU CHE), Professor of Law, Potchefstroom University for Christian Higher Education.
ministries. It furthermore provides general basic norms that may be used to introduce new environmental legislation or to amend or maintain existing legislation.

Developing countries all over the world have inherited fragmented and uncoordinated environmental legislation *inter alia* due to colonial rule. In South Africa fragmentation in environmental legislation was exacerbated by the so-called homeland system. Fragmentation of environmental legislative competence is, however, continued by the current Constitutional dispensation, for environmental governance is defined to be a concurrent competency between national and provincial spheres of government. This dispensation requires co-ordination by means of environmental framework legislation.

According to Iqbal, legislation addressing environmental problems was promulgated in the colonial era to facilitate resource allocation and exploitation, rather than to conserve or manage sustainable use of environmental resources. This colonial legacy necessitates environmental law reform in almost all post-colonial democracies. To date approximately 80 countries worldwide have accepted some or other form of environmental framework law.

Environmental framework elements are recognisable in some South African acts since 1996. Section 24 of the Constitution of the Republic of South Africa establishes the principal framework in terms of which other legislation has to be interpreted. NEMA, however, is to date the only true environmental framework law, while other sectoral-specific legislation such

---


3 Cf also UNEP *Proposal for a Basic Law on Environmental Protection and the Promotion of Sustainable Development* Document Series on Environmental Law No 1 (1993) 6; JR Nolon *Fusing economic and environmental policy: the need for framework laws in the United States and Argentina (Part B)*, paper presented at a seminar on the Law of Sustainable Development in Argentina (No date) [http://www.law.pace.edu/landuse/library/felipa.html](http://www.law.pace.edu/landuse/library/felipa.html) [Date of access 10 January 2000].

4 Iqbal op cit n1 at 2; cf. also UNEP op cit n3 at 5.


6 Bray op cit n2 at 1-12.

7 Iqbal op cit n1 at 2.

8 Iqbal op cit n1 at 3.

9 108 of 1996.
as the National Water Act\textsuperscript{10}, the Development Facilitation Act and the National Forests Act\textsuperscript{11} contain some framework legislation elements.

Environmental framework legislation is characterised by: (a) generic legal elements, (b) a flexible approach to address changing circumstances, (c) dedicated sectoral-specific legislation as well, as (d) the inclusion of broad based environmental policy and principles. Environmental framework legislation generally also endeavours to ensure: (a) popular broad-based participation during its formulation phase, (b) co-operative governance between all spheres and sectors of government, (c) use of innovative integration of multiple environmental management tools and instruments in order to (d) benefit the environment.

NEMA is under review within one year after its promulgation. Value may be added to both this process and the revision of the Act, if the generic characteristics and the desired achievements of environmental framework legislation are fully understood. The purpose of this article is to investigate the current international understanding of environmental framework legislation and to test the first revision of NEMA against the measures generally included in such legislation.

The generic characteristics of environmental framework legislation are discussed first, followed by an exposition of intended achievements. NEMA is then compared to the identified characteristics and desired achievements of environmental framework legislation as they are currently understood, culminating in the identification of improvement opportunities

2 Characteristics

Current examples of environmental framework law share certain generic characteristics.\textsuperscript{12} The following are discussed: (a) generic elements, (b) inherent flexibility, (c) arrangements for both overarching and sectoral-specific legislation, as well as (d) the inclusion of environmental policy and principles.

\textsuperscript{10} 36 of 1998.
\textsuperscript{11} 84 of 1998.
\textsuperscript{12} Cf also UNEP op cit n3 at 10.
2.1 Generic elements

Elements, generic to most legislation originating from the Anglo-American legal tradition,\(^\text{13}\) are also found in environmental framework legislation.

2.2 Flexibility

One of the principal characteristics of environmental framework legislation is to provide 'a broad and flexible legal framework to address environmental issues and for responding to changes in socio-economic and ecological parameters'.\(^\text{14}\) Flexibility of environmental framework legislation is achieved by means of broad-based policy principles, which in turn, are supported by separate, sectoral-specific legal arrangements.

2.3 Relationship between overarching and sectoral-specific legislation

Sectoral-specific legal arrangements are often cascaded down from sectoral-specific policy documents such as white papers, policy statements and discussion documents to sectoral-specific legislation and regulations (see figure 1 for the position in South Africa as it evolved up to the current review of NEMA).\(^\text{15}\)

---

\(^{13}\) The generic elements include inter alia the preamble, short title and commencement, definitions, institutional arrangements, civil liability, offences and penalties and miscellaneous provisions such as regulatory powers, repeal of laws and transitional arrangements – cf. also Iqbal op cit n1 at 4-17; UNEP op cit n3 at 38-42.


\(^{15}\) Cf. Department of Environmental Affairs and Tourism Law Reform Programme (No date) http://www.environment.gov.za/lrp/index.html [Date of access 10 January 2000].
Figure 1: Illustration of relationship between environmental framework law and sectoral-specific legislation

Framework legislation

National Environmental Management Act 107 of 1998

Framework policy


Sectoral policies

- Discussion Document on Climate Change

Sectoral legislation or strategies

- Legislation pending in terms of the law reform process
- Legislation pending in terms of the law reform process
- Others to follow
2.4 Policy and principles

Some international environmental framework legislation contains environmental policy statements, while others have broadly defined environmental principles.\(^{16}\) Both policy statements and principles serve as a framework against which all or defined actions are to be considered.

A fundamental requirement of both policy statements and principles defined in terms of environmental framework legislation should be the desire to enhance sustainability. To move towards sustainability, equal justice should be given to the three spheres of sustainability, the ecological, economic and social dimensions, which are supported by clearly defined societal rights (see table 1).\(^{17}\) Sustainability principles are defined in \textit{inter alia} the Ceres Principles\(^{18}\), Agenda 21\(^{19}\), Responsible Care\(^{20}\), ICC Principles for Sustainable Business Development\(^{21}\) and Caring for the Earth\(^{22}\), as well as identification of sustainability criteria. Some sustainability elements are listed in Table 1. It is argued that, in order to promote sustainability, environmental framework legislation should address principles from all the sustainability spheres.

Table 1: Sustainability principles and rights

<table>
<thead>
<tr>
<th>Rights</th>
<th>Ecological sustainability</th>
<th>Economic sustainability</th>
<th>Social sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right to a clean and healthy environment</td>
<td>Protection of the biosphere (ecosystems and diversity)</td>
<td>Inter- and intra-generational equity</td>
<td>Environmental awareness and information</td>
</tr>
</tbody>
</table>

\(^{16}\) Cf UNEP op cit n3 at 6; GM Ferreira 'Omgewingsbeleid en die fundamentele reg op 'n skoon en gesonde omgewing' (1999) 1 TSAR 90-113.

\(^{17}\) According to Iqbal op cit nl at 5, some basic principles such as the right to a clean and healthy environment, the right to sue, sustainable utilisation of natural resources, the polluter pays principle, inter-generational equity, the precautionary principle and conservation of biological diversity should be included in framework legislation. Cf. also UNEP op cit n1 at 18-20.


\(^{19}\) Department of Environmental Affairs and Tourism \textit{The Rio Declaration on Environment and Development. Agenda 21 – An Agenda for Sustainable Development into the 21st Century} (May 1998).

\(^{20}\) Ryding op cit n18 at 423-424.


\(^{22}\) Ryding op cit n18 at 519-520.
### Evaluation of NEMA as Framework Legislation

<table>
<thead>
<tr>
<th>Right to sue</th>
<th>Precautionary principle</th>
<th>Sustainable resource use</th>
<th>Increased transparency and participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right of workers to be protected</td>
<td>Pollution prevention</td>
<td>Waste reduction</td>
<td>Improvement of the quality of life</td>
</tr>
<tr>
<td>Right of access to information</td>
<td>Eco-efficiency</td>
<td>Polluter pays principle</td>
<td>Humans at the centre</td>
</tr>
<tr>
<td>Protection of whistle-blowers</td>
<td>Recognition of carrying capacities and utilisation of sustainable yield</td>
<td>Cleaner production</td>
<td>Protection of cultural heritage and value systems</td>
</tr>
<tr>
<td>Protection of sensitive ecosystems</td>
<td>Internalisation of all costs</td>
<td>Environmental justice</td>
<td></td>
</tr>
<tr>
<td>Rehabilitation of disturbed ecosystems</td>
<td>Full environmental cost accounting</td>
<td>Recognition of traditional and ordinary knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recognition of women and youth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equity</td>
</tr>
</tbody>
</table>

#### Integrative principles
- Holistic or cradle to grave approach:
  - Product life cycle
  - Project life cycle
  - Environmental management life cycle
- Consideration of impacts prior to action
- Creation of alliances and partnerships
- Norms and standards
- Duty of care
- Co-operative governance

### 3 Defined achievements

Environmental framework legislation should, despite its broad based, flexible and overarching nature, also facilitate desired outputs. The most
important of these outputs are the following: (a) provision for broad based representation and input, (b) establishment of co-operative governance, (c) empowerment of lead agencies and (d) the innovative integration of environmental management instruments and tools.

3.1 Provision for broad-based representation and input

Experiences with drafting environmental framework legislation from Latin-America, the Caribbean and South Africa suggest that an open, representative and transparent process be followed to ensure not only intra-generational equity, but also to ensure recognition of local knowledge and diverse needs.23

3.2 Establishment of co-operative governance

Another fundamental achievement of environmental framework legislation when compared to sectoral-specific environmental legislation is the creation of mechanisms and structures to make arrangements for co-operative governance. Co-operative governance entails more than the co-ordination between different spheres of governance i.e. internationally, inter-regionally and intra-governmental alignment. It actually entails alignment of policies, plans and programs across different spheres of government, as well as between fragmented line function competencies. It furthermore creates procedures and processes for empowering civil society to engage in environmental governance – a dimension that is generally referred to as management by outsiders (MBO).

An integrated management by outsiders (MBO) programme includes relationships and empowerment of stakeholders outside formal government structures such as civil society, NGOs and CBOs as well as the private sector in terms of the principle of controlled self-regulation.

3.2.1 International co-operation

Co-operative governance at an international scale may be divided into two distinct elements, viz international law as framework law and provision for

23 Cf also UNEP op cit n3 at 3-6, 14. To ensure that national laws comply with framework legislation is a step in the right direction. Negotiations similar to those in Latin-America and the Caribbean will be needed to ensure proper regional co-operation in this regard.
mechanisms to ensure co-operation and integration between governments at an international level.

Environmental law is often drafted on this level as treaties and conventions and in a draft format as discussion or working documents. This legislation may also be regarded as environmental framework legislation. Other fundamental elements of environmental framework legislation at the national level should be to ensure participation in negotiations dealing with the writing of conventions as well as to make legislative proposals in this regard and to ensure the establishment of mechanisms and competencies to regulate international treaties and conventions.25

3.2.2 Inter-regional alignment

Framework legislation is also an important instrument to address environmental problems within the regional context. Environmental degradation and pollution know no boundaries. South Africa is part of the Southern African Development Community (SADC) and in that context it is important to ensure that legislation in the region corresponds across national boundaries. One of the objectives of framework legislation is to allow for inter-regional co-ordination and integration of fundamental principles of environmental law. Corresponding environmental framework legislation not only achieves improved co-ordination and enforcement of environmental laws but also the enhancement of intra-regional sustainable development.27

Environmental framework legislation does not exclude the possibility of each country to regulate its own needs by way of sectoral-specific legislation

---

24 Iqbal op cit n1 at 15.
25 South Africa has ratified several international conventions and treaties. These conventions can be regarded as framework legislation that has to be enacted into sectoral-specific national legislation. The World Heritage Convention Act 49 of 1999 is an example of such sectoral-specific legislation. Cf also D Kaniaru 'UNEP's Development and implementation of environmental law' in UNEP op cit n3 at 137-149 and Okidi op cit n1 at 327-335 for a discussion of various global and regional environmental instruments.
26 Cf also S Timpson 'Creating a just future - the role of the judiciary and the law on sustainable development' in UNEP Southeast Asian Justices Symposium - The Law on Sustainable Development (1999) 9 at 10.
27 As R Barth stated: ‘...it is not only environmental issues that have to be integrated, but also economic and developmental issues. This is what sustainable development is all about...’, address at a seminar on the Law of Sustainable Development conducted at Pace University School of Law, White Plains, New York (March 1995)

http://www.law.pace.edu/landuse/library/barth.html [Date of access 10 January 2000].
that may differ between countries to account for differences in legal and administrative regimes.  

3.2.3 Intra-governmental co-operation

Intra-governmental co-ordination of environmental management entails not only horizontal alignment between independent, sectoral-specific line ministries, but also vertically between different spheres of governance as far as fundamental sustainability policy issues and principles are concerned. According to UNEP the ‘ultimate aim of the institutional initiatives … is to design and apply environmental policy for sustainable development as a collective undertaking of the entire State organisation, regardless of management level or specificity.’

A second element of intra-governmental co-operation entails the creation of co-operative structures between different levels and spheres of government. Environmental issues are complex and multi-faceted which cannot be addressed by a single institution. As Iqbal states the ‘effective implementation of environmental legislation depends on the existence of appropriate institutional arrangements.’ Iqbal proposes that there should be an inter-ministerial national environment council, an environment ministry (or authority/agency) as well as different environmental planning committees on national and district levels.

The inter-ministerial council should be chaired by the prime minister or president of a country. In some countries these councils have executive functions. Institutions can, however, only be established if there are sufficient human and financial resources available. Otherwise, consideration should be given to existing environmental governance structures. This institution should deal with national policy formulation, goals and objectives as well as the promotion and facilitation of co-ordination and co-operation.

A national environmental action plan committee/commission should be introduced to prepare a national environmental action plan that has to be

---

28 Iqbal op cit n1 at 12-13.
29 Cf also 3.3 and 3.4. UNEP op cit n3 at 6-7 defines environmental management as to ‘include the set of State activities aimed at environmental conservation, preservation, improvement, restoration and monitoring direct intervention in the natural and man-made environment, and control of individual activities’ – cf also the draft proposal at 28-29.
30 UNEP op cit n3 at 8.
31 Iqbal op cit n1 at 6.
32 Iqbal op cit n1 at 6.
33 Iqbal op cit n1 at 7-10; cf also UNEP op cit n3 at 7-9, 20-25.
34 Iqbal op cit n1 at 7. Cf. also Bray op cit n2 at 1-12.
updated every three to five years. The committee may consist of representatives of all government ministries, representatives of universities, business committees, NGOs and research institutes and industries.\textsuperscript{35} This committee/commission integrates activities on a horizontal level between various competencies.\textsuperscript{36}

It is also proposed that framework legislation should provide for district environmental committees to ensure vertical co-operation\textsuperscript{37} to the lowest sphere. These committees may include representatives from government departments, local authorities, farmers, business community, NGOs, women groups and any other person who may assist the committee in preparing a district environmental action plan.\textsuperscript{38} These committees have to liaise with and report to the national action plan committee/commission.

3.2.4 Management by outsiders (MBO) arrangements outside formal government

A fundamental principle of modern environmental governance entails deployment of various mechanisms and tools that empower outsiders to participate in environmental governance.

Two strategies are identified. The first entails empowerment of civil society\textsuperscript{39} while the second allows for co-operative agreements between the environmental lead agent and other spheres of government, the private sector as well as private individuals or juristic persons.

3.3 The environmental lead agency

Iqbal\textsuperscript{40} proposes that environmental framework legislation should provide for an environment ministry, authority or agency that co-ordinate, monitor and supervise environmental activities, implement environmental policy, ensure the integration of environmental concerns in national planning, initiate legislation, set standards, review EIAs and promote environmental

\textsuperscript{35} Iqbal op cit n1 at 9.
\textsuperscript{36} UNEP op cit n3 at 7.
\textsuperscript{37} UNEP op cit n3 at 8.
\textsuperscript{38} Iqbal op cit n1 at 9-10.
\textsuperscript{39} Cf 4.2.2.3.
\textsuperscript{40} Iqbal op cit n1 at 8.
awareness programmes. This institution should also ensure that the public participation\textsuperscript{41} process is properly conducted.\textsuperscript{42}

Three possible environmental lead agent scenarios may be identified. First, increased centralisation of environmental control at a national level. Second, the vertical devolution of power to provincial and local organs of state, as well as the horizontal decentralisation of competence between various environmental line functionaries.

Powers allocated to a lead agent in terms of environmental framework legislation will be different for the three generic models identified, depending on the administrative and legislative dispensation in a particular country. Powers may vary between coercive enforcement of national standards and norms by the lead agent to the recognition of the autonomous competencies of various environmentally orientated agents. In the case of the latter model, the environmental lead agent is then tasked to provide direction through general policy and principles in terms of which the independent line functions of the executive must align their activities. The latter strategy allows for co-operation and alignment between fragmented competencies without jeopardising their autonomy to act.

3.4 Clear definition of role, responsibilities and authorities

In the event of fragmented and decentralised environmental governance dispensations, the roles, responsibilities and authorities of the various spheres of governance, as well as of the different executive competencies, need to be clearly defined, in order to prevent conflict and the inadvertent omission of duties.\textsuperscript{43}

3.5 Conflict resolution

Environmental framework legislation should also make provisions for conflict resolution between organs of state. If legislation in terms of which any line function exercises its authority is in conflict with environmental

\textsuperscript{41} In terms of environmental legislation public participation should rather be interpreted as public involvement. The public, defined as interested and affected parties (I&APs), has a right to be heard and to be informed about environmental matters. No provision is, however, made for their participation in decision-making processes. Apart from the right to be informed and to inform, I&APs may also make use of the administrative review and appeal process. NEMA refers to 'public participation'. When reference is made to the Act, 'public participation' is used. Otherwise the term 'public involvement' is adopted.

\textsuperscript{42} UNEP op cit n3 at 42.

\textsuperscript{43} Iqbal op cit n1 at 8.
framework legislation, the latter should prevail. Environmental framework legislation should therefore also define mechanisms for conflict resolution should it occur.

3.6 Innovative integration of multiple environmental governance and management instruments

A general principle of current perspectives on integrated environmental management and governance is the creative integration of multiple environmental policy and governance instruments as well as management tools to achieve sustainability (see figure 2). Tools and instruments may be classified in four general disciplines, i.e. command and control, fiscal arrangements, agreements and civil-based instruments and tools.

Figure 2: Generic classes of environmental management and governance instruments

---

44 Iqbal op cit n1 at 8.
45 In the context of this article integrated environmental management means the integrated use of multiple environmental management and governance tools.
46 Iqbal op cit n1 at 3-4; cf. also UNEP op cit n3 at 6-14.
This shift away from a command and control bias\textsuperscript{47} to environmental governance, towards an innovative hybridisation of multiple instruments and tools is illustrated in figure 3.

\textbf{Figure 3: Shift from command and control to hybrid use of multiple instruments}\textsuperscript{48}

\textsuperscript{47} Command and control is not always favoured as the best option. Cf. also address by R Hanna at a seminar on the Law of Sustainable Development conducted at Pace University School of Law, White Plains, New York (March 1995) \url{http://www.law.pace.edu/landuse/library/barth.html} [Date of access 10 January 2000]. Hanna says the following regarding the USA system: 'Our land use systems are breaking down because they cannot handle complexity. They tend to be command and control structures where standards and procedures are centrally determined and compliance is enforced upon other parts of the system. Other important public land use influences are uncoordinated altogether with this centralised process. In a highly complex world, this doesn't work.' In the case of command and control the socio-cultural environment can play an important role – either in enforcement or the lack thereof – cf. AA Oposa ‘A socio-cultural approach to environmental law compliance: a Philippine scenario’ in UNEP op cit n3 101 at 103-104, 113.

\textsuperscript{48} Graph adapted from B Long in UNEP Industry & Environment – vol. 17(4).
Modern environmental framework legislation should therefore make provision for the deployment of multiple policy instruments (see table 2) and environmental management tools (see table 2) in line with the developments illustrated in figure 3. The instruments are classified in terms of the four classes indicated in figure 2, while the environmental management tools are classified in terms of the Deming PDCA cycle.

Table 2: Environmental Governance Instruments

<table>
<thead>
<tr>
<th>Command and Control instruments</th>
<th>Environmental Governance Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Environmental law</td>
</tr>
<tr>
<td></td>
<td>• Inspections</td>
</tr>
<tr>
<td></td>
<td>• Requests for more information</td>
</tr>
<tr>
<td></td>
<td>• Audits</td>
</tr>
<tr>
<td></td>
<td>• Prosecutions</td>
</tr>
<tr>
<td></td>
<td>• Interdicts</td>
</tr>
<tr>
<td></td>
<td>• Restraint orders</td>
</tr>
<tr>
<td></td>
<td>• Commissions of inquiry</td>
</tr>
<tr>
<td></td>
<td>• Authorisations, permits, licences, etc</td>
</tr>
<tr>
<td></td>
<td>• Directives</td>
</tr>
<tr>
<td></td>
<td>• Penalties</td>
</tr>
<tr>
<td></td>
<td>• Orders</td>
</tr>
<tr>
<td></td>
<td>• Liability reforms</td>
</tr>
<tr>
<td></td>
<td>• Statutory record-keeping and reporting</td>
</tr>
<tr>
<td></td>
<td>• Environmental standards</td>
</tr>
<tr>
<td></td>
<td>• Model bylaws</td>
</tr>
<tr>
<td></td>
<td>• Environmental restoration orders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Civil based instruments</th>
<th>Environmental Management Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Education</td>
</tr>
<tr>
<td></td>
<td>• Public awareness</td>
</tr>
<tr>
<td></td>
<td>• Access to information</td>
</tr>
<tr>
<td></td>
<td>• Public participation</td>
</tr>
<tr>
<td></td>
<td>• Increased <em>locus standi</em></td>
</tr>
<tr>
<td></td>
<td>• Class action</td>
</tr>
<tr>
<td></td>
<td>• Private prosecution</td>
</tr>
<tr>
<td></td>
<td>• Beneficial cost awards</td>
</tr>
<tr>
<td></td>
<td>• Green rights</td>
</tr>
<tr>
<td></td>
<td>• Protection of whistle blowers</td>
</tr>
<tr>
<td></td>
<td>• Protection of workers</td>
</tr>
<tr>
<td></td>
<td>• Eco-labelling</td>
</tr>
<tr>
<td></td>
<td>• Public waste and pollution inventories</td>
</tr>
</tbody>
</table>

49 This list is illustrative and not an exhaustive list of all instruments.
### Economic instruments

- Incentives and awards
- Demand-side management
- Disincentives
- Tradable/marketable permits
- Depository return schemes
- Security deposits
- Environmental charges
- Trade restrictions
- Pricing policies
- Differential indirect taxes
- Tax concessions
- Subsidies (investment, research and development, activity)
- Product charges/taxes
- Resource charges/taxes
- Emission charges
- Process charges/taxes
- Two-tier tariffs
- Deposit-refund system
- Green purchasing
- User fees
- National environmental fund/account

### Agreements

- International agreements
- Covenants and co-operative agreements
- Environmental management systems/Controlled self-regulation

### Dispute settlement instruments

- Mediation
- Arbitration
- Ombudsperson
- Environmental tribunals/courts
- Revision
- Appeal

---

Table 3: Environmental Management Tools

<table>
<thead>
<tr>
<th>PLAN</th>
<th>CRITERIA AND STANDARDS</th>
<th>MANAGEMENT TOOLS</th>
<th>CHECKS &amp; BALANCES</th>
<th>REPORT AND COMMUNICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALYTICAL TOOLS &amp; PLANNING</td>
<td>Sectoral environmental performance standards</td>
<td>ISO 14001</td>
<td>Environmental monitoring</td>
<td>Environmental reporting</td>
</tr>
<tr>
<td>Environmental Impact Assessment</td>
<td>ISO 14000 family of management standards</td>
<td>Cleaner Technology</td>
<td>Inspection, analysis and records</td>
<td>Environmental communication</td>
</tr>
<tr>
<td>Strategic Environmental Assessment</td>
<td>Integrated waste management</td>
<td>Environmental auditing</td>
<td>State of the Environment Reports</td>
<td></td>
</tr>
<tr>
<td>Social Impact Assessment</td>
<td>Pollution prevention</td>
<td>Public participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental planning</td>
<td>Emergency detection and response plans</td>
<td>Improvement plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency planning</td>
<td>Life cycle assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Support for the deployment of multiple subsystems in environmental framework legislation is to be found in the general theory of environmental impact assessment systems in terms of the redundancy and insider-outsider hypotheses.

An important achievement of the innovative deployment of multiple instruments is what Landau\(^{51}\) calls the benefit of multiple redundancies. Put differently, duplication and overlap between multiple subsystems provide checks and balances by allowing some subsystems to either suppress error or to generate alternative strategies, should one of them fail. The theoretical support for redundancy and overlap is that when and where one subsystem fails, the other may serve to alert the former.\(^{52}\) Taylor\(^{53}\) also argues that

---

\(^{51}\) M Landau ‘Redundancy, rationality and the problem of duplication and overlap’ 20 Public Administration Review 346-358.


\(^{53}\) Taylor op cit n52.
there is a direct relationship between the number of redundant systems and the level of reliability that is achieved. For example, should the command and control subsystem fail to ensure protection of the environment, one of the other subsystems, i.e. empowerment of civil society, financial instruments or agreements, may take over. The opposite is also valid. When two or more redundant systems function simultaneously, a complimentary reinforcement of desired behaviour is achieved, while reliability is improved.

The successful combination of command and control strategies with empowerment of civil society also establishes a unique informal relationship between insiders and outsiders.

The informal relationships hypothesis suggests that the multiple governance system is driven by the inherent mismatch between the aspirations, skills, as well as the values and knowledge subsystems of insiders making decisions and outsiders affected by decisions. Insiders often have information about issues, but they have neither the mandate, nor the opportunity to challenge bureaucratic behaviour patterns. Outsiders, on the other hand, may have the motivation to challenge bureaucratic behaviour, but they often lack the necessary information to gain support and a sympathetic hearing.

Both groups are therefore incapacitated to act as a result of their own inherent inadequacies. Outsiders are now afforded access to information and other instruments, while insiders gain access to external expertise and support systems which are empowered to challenge issues.

It is argued that the innovative combination of command and control instruments with especially civil-based instruments and agreements, generates a mutual dependency between insiders and outsiders. This relationship ensures that the multiple system is continually sustained and renewed when compared with single and more coercive instruments such as

---

54 The bureaucracy within the command and control system i.e. the executive, legislative and judicial functionaries.
55 Civil society as e.g. represented by environmental NGOs and CBOs.
56 Taylor op cit n52.
57 Taylor op cit n52 refers to this symbiotic association between outsiders and insiders as relationships of mutual dependency, mutual criticism and mutual exchange of knowledge, skills, motivation and support subsystems. Mutual dependency and exchange refer to the actual provision of information, support or motivation and other resources that are required by the other, while mutual criticism facilitated by the number of reviewing structures, tend to improve the quality of the inputs to the decision process.
command and control arrangements as well as other incentives or disincentives.\textsuperscript{58}

The redundant nature of multiple outsider structures, also tend to serve as mutually support or emergency support systems, for at least one outsider subsystem is bound to succeed, where others may fail, while it also provides an informal system of backup reliability in an otherwise fallible command and control system.

3.7 Benefits to the environment

Another fundamental achievement of environmental framework legislation should be tangible benefits to the environment as is stated by UNEP:\textsuperscript{59}

'The benefits of legislation are measured by their efficiency and their effectiveness. The former refers to the degree to which behaviour is regulated; in other words, the intrinsic capacity of the norms to achieve the objectives sought. The latter refers to the degree of social effectiveness actually achieved. In the specific case of environmental laws, the latter is particularly important, since it usually refers to changes in social behaviour which are deeply rooted and inconsistent with the concept of environmental protection and sustainable development.'

One of the principal tenets of environmental framework legislation is improvement of the opportunities to actually enhance environmental quality. Improved opportunities for success are achieved, as has been stated before, by the combination of co-operative governance and the integration of multiple environmental governance and management tools.

4 Environmental framework legislation v the National Environmental Management Act (NEMA)

NEMA is compared to both the characteristics and intended achievements of environmental framework legislation.

4.1 Characteristics

NEMA is designed to serve as overarching framework legislation (see figure 1 above). It was planned to be supported by sectoral-specific subordinate legislation. Hence the omissions from NEMA of some sectoral-specific

---


\textsuperscript{59} UNEP op cit n3 at 5.
issues, such as waste management, etc. NEMA compares well with most of the identified characteristics of environmental framework legislation.\(^{60}\)

No policy is, however, defined in NEMA, neither does it provide for the formulation of environmental policy as was the case in the Environment Conservation Act 74 of 1989.\(^{61}\) However, flexibility is achieved by means of an extended list of generic principles.\(^{62}\)

NEMA compares well with the sustainability principles and rights as defined in table 1. Two significant omissions are the principle of rehabilitation of existing disturbed ecosystems as well as the duty to develop norms and standards that define environmental quality.\(^{63}\)

4.2 Intended achievements

The current version of NEMA addresses some of the achievements that are expected from environmental framework legislation. However, significant omissions offer opportunities for improvement.

4.2.1 Broad based representation and input

The drafting of NEMA was preceded by the CONNEPP-process,\(^{64}\) which

\(^{60}\) Cf. 2.


\(^{62}\) This is in line with the current tendency in South Africa to include policy principles in national legislation. Cf, eg the Development Facilitation Act 67 of 1995, NEMA, the National Water Act 36 of 1998 and the Forestry Act 84 of 1998. This practice makes it impossible to predict how departments are going to interpret legislation. This trend is a concern to lawyers as divisions between the administration of law and policy tends to fade. To the contrary, inclusion of policy principles in legislation elevates their status to primary legislation when compared to the subordinate status that policy generally enjoys, as well as allows for flexible interpretation. This is leading to an administrative state, where parliament makes policy and the executive takes over judicial and legislative functions.

\(^{63}\) In terms of section 2 of NEMA all actions and decisions of state organs (as defined in s 239 of the 1996 Constitution) that may significantly affect the environment (s 2(1)) have to be in accordance with the principles, which can be interpreted according to the socio-economic and environmental conditions within spatio-temporal variations. The principles also serve as a general framework in which environmental management and implementation plans (both plans need to be developed by identified government departments in terms of s 11 of NEMA) should be formulated and as guidelines for government departments in exercising their functions in terms of any other legislation (s 2(1)(b)-(c)).

\(^{64}\) The Consultative National Environmental Policy Process.
allowed for broad-based discussion and input by all stakeholders.\textsuperscript{65} The information collection process that preceded NEMA set a precedent in South Africa and serves as an example of consultation and participation by a broad-based stakeholder group before legislation is drafted.

4.2.2 Co-operative governance

4.2.2.1 International and inter-regional alignment

The adoption of international instruments and their application in national law is regulated by the Constitution.\textsuperscript{66} The Minister may, however, (a) make recommendations to cabinet and parliament to accede to, or ratify international environmental instruments, (b) publish the provisions of the international environmental instruments in the \textit{Government Gazette} or (c) introduce legislation to give effect to these instruments dealing \textit{inter alia} with (i) the co-ordination of the implementation of the instrument and (ii) to allocate responsibilities in terms thereof. The Minister must also report amongst others once a year to Parliament regarding the international environmental instruments for which he or she is responsible as well his or her participation in international meetings. The progress with the implementation of international environmental instruments, the efficacy of co-ordination instruments and initiatives and negotiations undertaken in the region of Southern Africa must also be reported. An Annual Agenda 21 Performance Report must be compiled by the Minister to serve as an audit report on government's performance.\textsuperscript{67}

NEMA conforms to the generic requirements for environmental framework legislation as far as international environmental instruments are concerned, for it makes arrangements to participate in negotiations, implement agreements as well as to measure and report on progress.

4.2.2.2 Intra-governmental co-operation

Co-operative governance is an important objective set by the Constitution of the Republic of South Africa, 1996. Chapter 3 of the Constitution defines the principles of co-operative governance between all spheres (national, provincial and local) of government to be distinctive, interdependent and

\textsuperscript{66} Section 231-233.
\textsuperscript{67} Section 26(2)(d) NEMA.
interrelated. For co-operative governance to be effective, it needs to function both vertically between various spheres of government, as well as horizontally, within the same sphere of government between separate line functions.

**Creation of co-operative governance structures**

The purpose of NEMA is to establish co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state. Co-operative governance is inter alia achieved by the establishment of a National Environmental Forum and a Committee for Environmental Co-ordination.

The National Environmental Forum has to inform the minister on (a) stakeholder views regarding the implementation of the environmental principles, (b) any other matter dealing with environmental management and governance and (c) appropriate methods for monitoring compliance with the principles.

NEMA also introduces an institution similar to the environmental action planning committee proposed by Iqbal, although representation is not as extensive. The Committee for Environmental Co-ordination consists of the various directors-general of government departments whose actions may have an effect on the environment, the provincial heads of department as appointed by the Minister in concurrence with the MEC and a representative of a national organisation that represents local governments. The purpose of this committee is to promote the integration and co-ordination of

---

68 S 40(1). Cf also Bray op cit n2 at 3-6 for a thorough discussion of the constitutional provisions dealing with co-operative governance.

69 Long title. For a detailed discussion of the co-operative governance in NEMA cf Bray op cit n2 at 6-10.

70 The National Environmental Advisory Forum consists of 13 to 15 members appointed for their experience, expertise and skills (including women, youth and persons disadvantaged by unfair discrimination as well as vulnerable persons) - s 4(2).

71 Section 3(2).

72 Cf 2.3.

73 Section 8 – Water Affairs and Forestry, Minerals and Energy Affairs, Land Affairs, Constitutional Development, Housing, Agriculture, Health, Labour, Arts, Culture, Science and Technology.

74 The organisation must be recognised in terms of s 2 of the Organised Local Government Act 52 of 1997 – s 8(2)(i).
environmental functions of organs of state\textsuperscript{75} and to promote the purpose and objectives of environmental implementation plans (EIP’s) and environmental management plans (EMP’s).\textsuperscript{76}

NEMA makes arrangements for intra-governmental co-ordination at the national level and to a certain extent between the national, provincial and local levels. No provision is, however, made for horizontal co-ordination at the local level by way of environmental planning committees.\textsuperscript{77} However, the extent to which co-operative governance objectives are to be achieved will depend on the response by the different organs of state and the leadership displayed by the Department of Environment Affairs and Tourism.

Environmental implementation and management plans

The requirement of NEMA that EIPs and EMPs are to be generated by identified organs of state, is an important mechanism to ensure that diverse line function activities\textsuperscript{78} are aligned with NEMA principles.\textsuperscript{79}

National departments listed in schedule 1 of the Act as well as the provinces had to prepare an environmental implementation plan by 31 August 2000.\textsuperscript{80} National departments listed in schedule 2\textsuperscript{81} of the Act have to prepare an environmental management plan by the same date. These plans have to be updated every four years.\textsuperscript{82} The purpose of environmental implementation and management plans are (a) to give effect to the principle of co-operative governance, (b) to co-ordinate and harmonise environmental policies, plans, programmes and decisions that may have an effect on the environment, (c) to secure the protection of the environment across the country, (d) to prevent unreasonable actions by a province that may be prejudicial to the economic and health interests of other provinces and (e) to

\textsuperscript{75} S 11-15, 23-24.
\textsuperscript{76} S 7(2).
\textsuperscript{77} Cf. also 2.3.
\textsuperscript{78} Policies, programmes, plans and projects (including legislation).
\textsuperscript{79} S 11.
\textsuperscript{80} Department of Environmental Affairs and Tourism (DEA&T), Department of Land Affairs (DLA), Department of Agriculture, Department of Housing, Department of Trade and Industry (DTI), Department of Water Affairs and Forestry (DWAF), Department of Transport and the Department of Defence - GN 70 GG 20820 28 January 2000.
\textsuperscript{81} DEA&T, DWAF, Department of Mineral and Energy Affairs (DM&E), DLA, Department of Health and Department of Labour.
\textsuperscript{82} The difference between EIP’s (s 13 NEMA) and EMP’s (s 14 NEMA) is summarised in the Department of Environmental Affairs and Tourism Guidelines for Preparation of the First Edition Environmental Implementation Plans and Environmental Management Plans (1999) 8.
4.2.2.3 Management by outsiders (MBO) arrangements

NEMA provides for MBO outside of government by means of civil representation in the National Environmental Advisory Forum as well as empowerment of civil society to be involved in matters relating to the protection of the environment.

Stakeholders from various sectors of South African society are represented in the National Environmental Advisory Forum. However, the forum functions as an advisory body only, which means that the promotion of 'the participation of all interested and affected parties in environmental governance' in effect means that civil society is empowered to make inputs and contributions to the Minister and not to participate in the decision-making processes per se. NEMA is furthermore silent on the procedural arrangements that are required to ensure meaningful public participation. It is expected that the review of the EIA regulations will provide more substantive guidelines for public participation.

NEMA, read with the constitutional rights, contains extensive arrangements to empower members of civil society to be involved in and contribute to activities aimed at protection of the environment. The principles refer for example to the need for increased environmental education and improved public awareness of environmental matters. The Act also makes provision for improved locus standi, class actions, private

---

83 Section 12.
85 JG Nel Unsustainable EIA Partnerships: Poorly-defined Rights, Roles, Responsibilities and Duties of EIA Stakeholders, paper delivered at the IAIA Conference: Partnerships for the New Century (2-4 October 2000).
86 Eg, right to an environment that is not detrimental to people's health or well-being (s 24), right of access to information (s 32), right to administrative justice (s 33), locus standi (s 38).
87 Section 2(4)(h) NEMA. According to Iqbal op cit n1 at 15 environmental framework legislation should provide for the integration of environmental education in the curricula of schools and universities, as well as in the non-formal sector; cf. also UNEP op cit n3 at 11, 34-35. There is no legal obligation to do so in South Africa, but a standard-generating body on environmental education is to be established that will ensure that environmental issues are included in the curricula of schools and tertiary institutions.
88 Section 2(4)(f)-(g) and s 3.
89 Section 32.
prosecutions, beneficial cost instruments, green rights, the protection of whistle blowers and the right of access to environmental information. A general right of access to information held by the state and private institutions is also formulated in terms of the Promotion of Access to Information Act 2 of 2000. NEMA does, however, not provide for the collection, analysis and active dissemination of environmental information by the state except the Agenda 21 report that has to be published in terms of section 2(b).

Another mechanism aimed at enhancing management by outsiders entails arrangements for controlled self-regulation in the form of environmental management co-operation agreements (EMCAs). NEMA provides for co-operation agreements to be entered into between the national, provincial or local authority and any person or community under specific conditions.

The NEMA arrangements for management by outsiders i.e. empowerment of civil society and co-operation agreements represent a marked departure from previous command and control practices and heralds a new era of innovative integration of multiple environmental management tools and governance instruments.
4.2.3 Environmental lead agent

The role and function of a lead agent has been extensively debated in South Africa since 1991. Inadequate competencies and powers of the environmental lead agent was a major concern and suggestions were forwarded to strengthen its mandate up to and including the publication of the White Paper on Environmental Management in 1997.

The White Paper defines the desired environmental lead agent in line with Iqbal’s perspective. The White Paper suggests the appointment of the national Department of Environmental Affairs and Tourism as the lead agent responsible for ensuring the integrated and co-ordinated implementation of its policy on environmental management. In accepting this appointment the Department undertakes to act as custodian of the nation's environment and accepts the obligation of ensuring that people's environmental rights are enforced.

The White Paper continues to envisage: (a) that national legislation should empower the lead agent to play its role in accordance with the Constitution and (b) to grant it the necessary powers to ensure compliance with national policy on environmental management, legislation, norms and standards. The lead agent should ensure that policies, legislation, norms and standards address current problems and have proactive solutions, while providing leadership and guidance for the implementation of co-operative governance.

However, the reality of the inherited South African administrative dispensation seemed to militate against aspirations to introduce a strengthened environmental lead agent. In terms of NEMA, the Department of Environment Affairs and Tourism assumes the role of a co-ordinator rather than that of a lead agent as is intended by Iqbal and to some extent also by the White Paper.

Government control over environmental matters is still devolved between spheres of government and fragmented between various line functions within the same sphere of government, for example water quality and quantity.

---

102 Cf 3.3.
103 Cf also the mission of the Department in the White Paper.
104 Cf part 5 of the White Paper.
105 Cf also the tables dealing with the location of administrative and executive powers and responsibilities of the lead agent and implementing agents for direct, indirect and supportive measures – part 5 of the White Paper. From this it is apparent that other government departments and the provinces may in some aspects also be regarded as lead agencies.
management, waste management,\textsuperscript{106} air quality management,\textsuperscript{107} coastal and marine resource management,\textsuperscript{108} management of agricultural resources,\textsuperscript{109} development\textsuperscript{110} and mining.\textsuperscript{111}

An attempt is made in NEMA to compensate for the lack of clearly defined lead agent functions for the national DEA&T by means of EIP’s and EMP’s that are to be generated by some line functions and provinces.\textsuperscript{112} The Director-General, however, monitors the compliance to EIP’s and EMP’s and may take any steps to remedy any failure of compliance.\textsuperscript{113} This dispensation does provide DEA&T with some of the lead agent functions as defined by Iqbal.

4.2.4 \textit{Roles, responsibilities and authorities}

A significant inadequacy of NEMA is the fact that roles, responsibilities and authorities of different environmentally related line functions as well as between the various spheres of government are not clearly defined. For example both NEMA and the National Water Act 36 of 1998 make provision for the control of emergency incidents.\textsuperscript{114} This can give rise to conflict between the different departments if one or the other department or a private person decides to investigate the incident through a specific department in order to negate or reduce the other department’s authority.

Another problem that needs to be addressed is formalising procedural arrangements between Departments that have joint jurisdiction over an activity. NEMA is not explicit on how to pro-actively make arrangements to avoid conflict.

4.2.5 \textit{Conflict resolution}

Conflict can originate between government departments as a result of conflicting legislation and administrative practices as well as between

\textsuperscript{106} The Environment Conservation Act 74 of 1989 appoints the Department of Water Affairs and Forestry as the agent.
\textsuperscript{107} Some control in terms of the Atmospheric Pollution Prevention Act 45 of 1965 is vested in the national DEA&T, while other control functions are vested in local authorities.
\textsuperscript{108} Control of coastal and marine resources are also divided between various competencies.
\textsuperscript{109} Department of Agriculture.
\textsuperscript{110} In terms of the Development Facilitation Act 67 of 1995 – Department of Land Affairs.
\textsuperscript{111} Department of Mineral and Energy Affairs.
\textsuperscript{112} Cf text under heading \textit{Environmental implementation and management plans} (supra at 23).
\textsuperscript{113} Section 16(2).
\textsuperscript{114} Section 30 and 20 respectively.
stakeholders such as between developers, public interest groups and competent authorities.

In terms of NEMA, conflict regarding the functions of national departments and other spheres of government has to be dealt with by the Committee for Environmental Co-operation.\textsuperscript{115} Conflict amongst departments within the same sphere and between different spheres of government, stakeholders and developers may also be resolved by mechanisms such as conflict resolution, arbitration and court action.\textsuperscript{116}

The South African Constitution regulates conflict between national and provincial legislation,\textsuperscript{117} but not conflict that may originate in the case of conflicting national statutes or conflict amongst state organs within the same sphere of governance.\textsuperscript{118} If the conflict originates as a result of the wording of different statutes the rules governing the interpretation of statutes have to be used to resolve the issue. There is no provision in the Constitution that framework legislation on a national level has preference over other legislation.\textsuperscript{119} The unfeasible prospect of a Constitutional revision or amendment is required to give preference to framework legislation.

Possible conflicts between legislation and between state organs can also be resolved by the co-ordination committee – their functions are inter alia to make recommendations regarding the harmonisation of environmental functions of all national departments\textsuperscript{120} as well as to advise government on law reform.\textsuperscript{121} They could for example decide to interpret and apply sectoral-specific laws in the light of framework law.

4.2.6 **Innovative integration of multiple instruments**

As has been stated above, environmental framework legislation should provide for an innovative and hybrid use of multiple instruments (see figure 2)\textsuperscript{122} such as command and control instruments and strategies, civil-based

\textsuperscript{115} Section 7(2)(f).
\textsuperscript{116} Section 17-19.
\textsuperscript{117} Section 146-150.
\textsuperscript{118} On a vertical level a provincial executive may intervene to ensure that a municipality fulfil its obligations – § 139 of the Constitution. In the same manner the national executive may intervene in a province – § 100 of the Constitution.
\textsuperscript{119} National framework legislation has preference over provincial legislation – s 146(2)(b). Cf also LM du Plessis ‘Enkele opmerkings oor die status en hiërargie van wetgewing onder die nuwe grondwetlike bedeling’ (1999) 1 TSAR 128-137.
\textsuperscript{120} Section 7(2)(f).
\textsuperscript{121} Section 7(2)(h).
\textsuperscript{122} Cf 3.2.
instruments, economic instruments, agreements and conflict management and dispute settlement.

4.2.6.1 Command and control instruments and strategies

Important command and control provisions are included in NEMA, such as inspections, requests for information, prosecutions, penalties, the issuing of model bylaws, the setting of standards, directives, authorisations, statutory reporting, redefinition of liability and environmental restitution orders.

Interdicts and restraint orders are dealt with by the common law, while the appointment of commissions of inquiry and the issuing of authorisations, directives, permits and licences are still done in terms of sectoral-specific legislation. Record-keeping is also dealt with in separate legislation.

NEMA does not provide for compliance auditing by the national and provincial government. It, however, makes provision for the issuing of model bylaws that may provide for environmental management performance audits to be conducted. It furthermore orders an annual audit to be conducted.

---

123 Provision should be made for the appointment of environmental inspectors and their duties and powers should be spelled out in the legislation - Iqbal op cit n1 at 14; UNEP op cit n3 at 8. NEMA does not refer to environmental inspectors. In terms of the Atmospheric Pollution Prevention Act 45 of 1965, however, a chief air pollution control officer and inspectors can be appointed – s 6(1). The National Water Act 36 of 1998 provides for the authorisation of persons to investigate inter alia whether any provisions of the Act are being contravened - s 124 read with s 125(3)(a).

124 Section 31.

125 Section 34.

126 Section 44(3).

127 Section 46.

128 Section 7(3)(e) read with s 146(2)(b)(i) of the Constitution.

129 Section 28(7).

130 Section 24.

131 Section 28(5).

132 Section 28(8). Although NEMA does not introduce strict liability in the real sense of the word, it does provide for the introduction of the polluter pays principle.

133 It is proposed in the case of framework legislation that the ministry/agency/authority and courts should be able to issue environmental restoration orders with regard to damage to the environment - Iqbal op cit n1 14; UNEP op cit n3 at 12. NEMA provides for environmental restoration orders in the case of the causing of significant pollution or degradation of the environment as well as of emergency incidents - s 28 and 30(6)-(9). Cf also F Soltau 'The National Environmental Management Act and liability for environmental damage' (1999) 6 SAJELP 33-51.

134 Section 46(5)(a).
conducted on the government's performance with respect to Agenda 21 commitments.\footnote{Section 26(2)(d)(i).}

NEMA fails to establish an integrated platform or process where applications for environmental authorisations are lodged, decisions are made and authorisations issued.\footnote{It should also provide for a simple pollution licence procedure. It is suggested that an industry should only need one to two licences rather than to apply for licences, authorities, etc. at each different government department – cf. Iqbal op cit n1 at 13-14; UNEP op cit n3 at 11, 30-31. Cf also M Kidd 'Integrated pollution control in South Africa – how easy a task?' (1995) \textit{SAJELP} 37-54.} NEMA compels the Committee for Environmental Co-ordination to only investigate and recommend the establishment of mechanisms for a single point in a province where applications for authorisations, licenses and other permissions could be considered in a co-ordinated manner.\footnote{Section 7(3)(e).}

NEMA makes limited provision for statutory reporting by the private sector. The notable exemption is reporting in terms of section 28(5) (reporting of pollution incidents). Extensive provision is made for government performance reporting such as annual reports on government and committee performances.\footnote{Cf, eg, s 10, 15, 16, 22, 24, 25, 26 and 31.} It, however, fails to provide for statutory reporting on environmental performance by the private sector.\footnote{Statutory reporting is currently enforced in a fragmented and \textit{ad hoc} manner by means of specific conditions formulated in numerous authorisations, permits and licences.}

In terms of framework legislation theory a definition of environmental quality criteria and emission standards should be given while a standard generating and enforcement review committee is to be established.\footnote{Iqbal op cit n1 at 11-12.} Such a committee should set environmental quality standards on \textit{inter alia}: soil, water, vehicle emissions, effluent discharge, waste, noise, buildings, structures and industrial products. Provision should also be made for exemptions to set standards and their enforcement.\footnote{Iqbal op cit n1 at 12. Cf JG Miller \textit{The USA experience in setting standards}, address at a seminar on the Law of Sustainable Development conducted at Pace University School of Law, White Plains, New York (March 1995) \url{http://www.law.pace.edu/landuse/library/barth.html} [Date of access 10 January 2000].} NEMA fails to identify which standards are to be set. Neither does it provide for the establishment of a standard generating and enforcement review committee, nor does it provide an interface or integration between the various role players such as DWAF, DE&AT and DM&EA, Department of Health, Department of Agriculture and the Department of Labour. The perpetuation
of a fragmented approach to environmental standard setting in South Africa is exacerbated by the absence of a uniform standard setting and enforcement procedure. The Committee for Environmental Co-ordination is tasked to only make recommendations on securing compliance with national norms and standards.

NEMA also fails to make arrangements for operational and archival record-keeping requirements for both the private and public sector. Provisions for operational and archival records to be kept by the private sector are fragmented and sectoral-specific. Public archival record-keeping in South Africa is dealt with by the Legal Deposit Act.

4.2.6.2 Civil-based instruments

NEMA is noted for its extensive civil-based arrangements. NEMA revolutionised previous environmental legislation by entrenching the principle of environmental management or governance by outsiders. Civil society is not only empowered to influence environmental decision-making, but also to fulfil the role of “co-governor” and or “co-manager”. It is achieved by NEMA in terms of the following provisions: environmental education, public awareness, access to information, public participation, increased locus standi, class action, private prosecution.

---

142 Cf T Winstanley ‘South African laws and policies which influence the adoption of clean technology’ (1998) 5 SAJELP 269-297.
143 As referred to in s 146(2)(b) of the Constitution.
144 Iqbal op cit n 1 at 15.
146 54 of 1997.
147 Section 2(4)(h) NEMA. According to Iqbal op cit n 1 at 15 environmental framework legislation should provide for the integration of environmental education in the curricula of schools and universities, as well as in the non-formal sector; cf. also UNEP op cit n 3 at 11, 34-35. There is no legal obligation to do so in South Africa, but a standard generating body on environmental education is to be established that will ensure that environmental issues are included in the curricula of schools and tertiary institutions.
148 Section 2(4)(f)-(g) and s 3.
149 Section 31. Cf. also Iqbal op cit n 1 at 15; UNEP op cit n 3 at 11; Du Plessis op cit n 93 395-403.
150 Section 2(4)(f)-(g).
151 Section 32.
152 Section 33.
beneficial cost awards,\textsuperscript{153} green rights,\textsuperscript{154} protection of whistle blowers\textsuperscript{155} and the protection of workers.\textsuperscript{156}

NEMA, however, does not provide for eco-labelling and public waste and pollution inventories for example in the sense that the United States of America introduced.\textsuperscript{157}

4.2.6.3 Economic instruments

NEMA is totally silent on the deployment of economic instruments as a modern strategy for environmental governance and management.\textsuperscript{158} The omission of this important toolbox is surprising in view of the fact that the DEA&T has undertaken extensive research on the use of fiscal instruments in environmental governance and management.\textsuperscript{159} At the time of writing no evidence could be found that the national DEA&T has prioritised the provision of fiscal instruments in terms of the advertised law reform process,\textsuperscript{160} while the National Water Act 36 of 1998 adopted various fiscal instruments as part of its water management strategy.

4.2.6.4 Agreements

Section 25 of NEMA deals with the incorporation of international environmental instruments. It also provides for the conclusion of environmental management co-operation agreements in section 35. Co-operation agreements are possible between any person or community for the purpose of promoting compliance with the principles set out in the Act. At the time of writing, regulations are being developed to direct co-operation agreements\textsuperscript{161} while the national DEA&T is engaged with the oil-refineries

\textsuperscript{153} Section 33(3)-(4) and 34(4).
\textsuperscript{154} Section 2(4) read with s 32 of the Constitution.
\textsuperscript{155} Section 31(3)-(8).
\textsuperscript{156} Section 29.
\textsuperscript{157} Cf also W Du Plessis 'Right to environmental information in the USA' (1998) 5 SAJELP 115-139.
\textsuperscript{158} See Table 1 for a list of the economic instruments.
\textsuperscript{159} Department of Environmental Affairs and Tourism \textit{A National Strategy for Integrated Environmental Management} (1998).
\textsuperscript{160} Department of Environmental Affairs and Tourism \textit{Law Reform Programme} (No date) http://www.environment.gov.za/lrp/index.html [Date of access 10 January 2000].
\textsuperscript{161} W Scholtz \textit{Milieuconvenanten, oftewel Omgewingsbestuursamewerkingsooreenkomste, as instrument van die Omgewingsreg: 'n Vergelykende Perspektief} (LLD thesis) (Leiden) (2001).
and other stakeholders to reach a co-operative agreement on sulphur reduction by South Africa’s oil refineries.162

4.2.6.5 Dispute settlement and conflict resolution

NEMA provides for conciliation,163 arbitration164 and appeal.165 Applications for revision are to be done in terms of common law. No provision is, however, made for an environmental tribunal or an environmental ombudsperson,166 despite numerous recommendations for the establishment of an independent environmental arbitrator (tribunal/ombudsperson).

4.3.2 Environmental management tools

NEMA makes inconsistent provision for environmental management tools (see table 3) when compared to the Deming management plan-do-check-act (PDCA) cycle of tools and activities.167 In order to be effective and sustainable, any suite of environmental management tools should address the PDCA cycle elements equitably. It is therefore argued that the environmental management tools provided for by NEMA may not deliver sustainable improvement and environmental quality.

162 Scholtz op cit n161.
163 Section 18.
164 Section 19.
165 Section 43.
166 Cf also Iqbal op cit n1 at 16; cf. also UNEP op cit n3 at 36-37; A Rabie ‘Environmental law in Australia’ (1995) 1 SAJELP 99 at 110.
167 Cf 3.6.
### Table 3: Environmental Management Tools

<table>
<thead>
<tr>
<th>PLAN</th>
<th>Analytical Tools &amp; Planning</th>
<th>Environmental Impact Assessment</th>
<th>Strategic Environmental Assessment</th>
<th>Social Impact Assessment</th>
<th>Environmental planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEMA</td>
<td>Yes</td>
<td>Yes(^{168})</td>
<td>Partly(^{169})</td>
<td></td>
<td>Partly(^{170})</td>
</tr>
<tr>
<td>Criteria and Standards</td>
<td>Sectoral environmental performance standards</td>
<td>ISO 14000 family of management standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEMA</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>Management Tools</td>
<td>Management Systems</td>
<td>Cleaner Technology</td>
<td>Integrated Waste Management</td>
<td>Pollution Prevention</td>
</tr>
<tr>
<td>NEMA</td>
<td>No</td>
<td>No</td>
<td></td>
<td>Yes(^{171})</td>
<td>Partly(^{172})</td>
</tr>
<tr>
<td>CHECK</td>
<td>Checks and Balances</td>
<td>Environmental Monitoring</td>
<td>Inspection, analysis and records</td>
<td>Environmental Auditing</td>
<td></td>
</tr>
<tr>
<td>NEMA</td>
<td>Partly(^{173})</td>
<td>Yes</td>
<td></td>
<td>Partly</td>
<td></td>
</tr>
</tbody>
</table>

---

\(^{168}\) Section 14(c) and 12(a) read with s 1(1)(i) ‘activities’.

\(^{169}\) Section 24(1) read with s 2.

\(^{170}\) NEMA is silent on environmental planning as an environmental management tool. Neither does it make arrangements for planning to reduce the environmental footprint of the activities of the different spheres of government. The EIP’s and EMP’s referred to in s 13 and 14 of NEMA only makes provision for planning to interface and line policies, programs and activities of the various line functions in accordance with the principles of NEMA and to avoid duplication.

\(^{171}\) Waste regulation is referred to as one of the principles dealing with sustainable development in s 2(4)(iv) namely ‘that waste is avoided, or where it cannot altogether be avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner.’ Cf. also the *White Paper on Integrated Pollution Control and Waste Management*. An Integrated Pollution Control and Waste Management Strategy is being prepared by government.

\(^{172}\) Cf s 2(4)(ii), s 1(1)(xxiv) ‘pollution’, s 28 (duty of care and environmental damage).

\(^{173}\) Various arrangements have been made in NEMA to monitor a number of issues. E.g. the National Environmental Advisory Forum has to advise the Minister on methods of monitoring compliance with the principles set out in section 2 (s 3(2)(b)(ii)); the Minister has to monitor the achievement, promotion and protection of a sustainable development in the EIPs and EMPs (s 12(e)); the Director-General has to monitor compliance with environmental implementation plans and environmental management plans (s 16(2)). Cf. also s 24(7)(f), 35(3)(c)(ii), 45(1)(f) and 46(5)(a). However, NEMA is silent on implementing an environmental quality monitoring program, i.e. an integrated approach to monitoring of environmental sectors, such as air quality, biodiversity, etc.
5 Conclusion

In South Africa NEMA serves as environmental framework legislation. In terms of international environmental framework legislation, theory environmental legislation has certain generic characteristics, is flexible, deals with the issue of overarching and sectoral-specific issues and include policy and or principles. NEMA complies more or less with these characteristics. With regard to the achievements of environmental framework legislation, NEMA was drafted by way of broad-based representation and input. One of the main features of NEMA is the attempt to achieve co-operative governance between different line functions in the international context as well as between same and different spheres of government. NEMA makes extensive arrangements for management by outsiders by way of empowering civil society and providing for co-operation agreements. It is a definite departure from the previous command and control practices. It also allows for the integration of multiple environmental management tools and governance instruments.

Although environmental framework legislation theory makes provision for the introduction of a strong environmental lead agent, this is not achieved by NEMA. This might be due to the present reality of the South African administrative dispensation. The roles, responsibilities and authorities/powers of the different line function departments are, however, not spelled out. This may lead to interpretation problems if two or more departments or state organs have similar functions. Conflict between different line functions can, however, be resolved by the Committee of Environmental Co-operation. There are, however, no provision in the Constitution that national framework legislation has preference over other

---

174 There are some reporting obligations in the Act, eg every organ of state must report annually within four months of the end of its financial year on the implementation of its adopted environmental management plan (s 16(1)(b)); reporting by the minister regarding international environmental instruments and state of the environment reports (s 26); reporting of emergency incidents (s 28(5)). There is, however, no general obligation on private bodies to report on emissions, waste disposal etc. There exists also no registry for such information.

175 Cf the principle in s 2(4)(h).
national legislation. If necessary, such a measure will have to be included in NEMA or resolved by an amendment in the Constitution.

With regard to the inclusion of a hybrid use of multiple instruments, NEMA is strong in some aspects while totally silent on others. There are various provisions in NEMA that can be regarded as command and control instruments and strategies. Some command and control strategies are not included, such as compliance auditing by the national and provincial government. NEMA also does not establish an integrated authorisation system, although it is one of the aspects that the Committee for Environmental Co-operation can make recommendations upon. There is only limited provision for statutory reporting by the private sector in contrast to reporting by the public sector. NEMA also does not establish a standard generating and enforcement review committee or provide an interface or integration amongst the various role players. This is unfortunate that the challenge to set up such a body was not taken by the drafters of NEMA. NEMA also fails to make provision for operational and archival record-keeping by both the private and public sectors.

The command and control system is supported by the inclusion of extensive civilly based arrangements, thereby entrenching the principle of environmental governance by outsiders. NEMA does, however, not provide for eco-labelling as public waste and pollution measures.

There are sufficient provisions in NEMA dealing with the enforcement of agreements, as well as to deal with dispute settlement and conflict resolution. The lack of economic instruments in NEMA is, however, an oversight that reduces the principle of multiple redundancies.

In order to achieve the principle of multiple redundancies, the provision of environmental management tools within the PDCA (plan-do-check-act) cycle of tools and activities should be consistent and equitable. If this is not achieved, sustainable improvement and environmental quality might not be achieved.

It is therefore recommended that the following should be considered when NEMA is amended:

- The roles, responsibilities, authority and powers of the different line function departments should be spelled out;
- Whether environmental framework legislation should have preference over national legislation;
- With regard to command and control strategies:
  - the inclusion of compliance auditing by national and provincial government;
  - the establishment of a single, integrated authorisation system;
• the inclusion of statutory reporting by the private sector;
• the establishment of a standard generating and enforcement review committee;
• provision for operational and archival record-keeping by both the private and public sectors;
□ The inclusion of economic instruments;
□ To ensure that the PDCA cycle elements are addressed equally in order to achieve sustainable improvement and environmental quality.