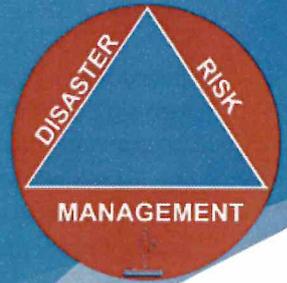


*The Gateway to Endless Opportunities*



# DISASTER RISK MANAGEMENT PLAN

Reviewed by:  
Department of Economic Development & Community Services  
Emergency & Disaster Risk Management Division  
Planning, Research and Policy Development Section  
Email: [DisasterManagement@windhoekcc.org.na](mailto:DisasterManagement@windhoekcc.org.na)  
May 2022

## FOREWORD

Every year, residents of the City face devastating losses caused by hazards such as fires, motor vehicle accidents, flash floods and other hazards which have significant bearing on communities, the economy, infrastructure and the environment. During 2020-2021, the City was hard hit by Covid-19. As Namibia's industrialisation and urbanisation trends increase, so do the risks of chemical and industrial accidents which require Best Practice Emergency and Disaster Risk Management response plans. These plans also serve as tools to support sustainable development and promote investor confidence.

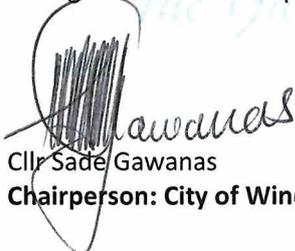
Windhoek being the capital city of Namibia and seat of Central Government and the economy is obligated to demonstrate proactive leadership and preparation for whatever emergency situation that may arise. Therefore, the City of Windhoek (CoW/The City) is obliged to enhance the quality of life of all stakeholders and to ensure public safety within its boundaries. To this end, the City's Disaster Management Plan of 2002 is hereby revised in line with the *Disaster Risk Management Act, (Act no. 10 of 2012)* and in conformity with international frameworks.

The revised plan follows the principles of the National Disaster Risk Management Plan (NDRMP) of 2011 which is aligned to the Namibia Disaster Risk Management Policy of 2009. The plan guides the City and its external stakeholders on actions and decisions to be taken **before, during and after** disaster situations and presents a broader stakeholder base and more proactive approach to disaster risk management. On the other hand, the Disaster Management plan of 2002 took a reactive approach as it simply guided the conduct of various divisions/departments and employees of the City during emergency situations.

The key focus of the *Disaster Risk Management Act, (Act no. 10 of 2012)* is preventive rather than reactive and reflects a holistic rather than emergency-based philosophy. This is evidenced by Government's call to integrate disaster risk reduction and climate change adaptation, with development planning and resource allocation frameworks. It is this approach which promotes community resilience and sustainable development.

Therefore, it is important that all stakeholders work together to understand and manage risks and devise proactive mechanisms to mitigate against them. This in turn serves to enhance Windhoek's disaster resilience levels. That said, it remains every individual resident and stakeholder's responsibility to adopt a similar proactive approach and reflects a need to foster a culture of joint responsibility at all levels of Namibian society.

It is against this backdrop that the 2022 *Disaster Risk Management Plan* is hereby presented.

  
Cllr Sade Gawanas  
Chairperson: City of Windhoek Disaster Risk Management Committee



## ACKNOWLEDGEMENT

This plan is a result of a consultative process that commenced in 2017 involving: all City of Windhoek departments, Government Ministries, the Namibia Chamber of Commerce and Industry, key state-owned enterprises and the Namibia Red Cross Society.



*The Gateway to Endless Opportunities*

## EXECUTIVE SUMMARY

1. The City's Disaster Risk Management Plan 2021 was developed in accordance with the Namibia National Disaster Risk Management Plan (NDRMP) of 2011 and the National Disaster Risk Management Policy (2009).
2. The aim of this plan is to provide a holistic approach to disaster risk management, outlining objectives and related activities in disaster prevention, preparedness, response and recovery.
3. The plan includes the 10 sectors identified in the National Plan namely:
  - Early Warning;
  - Public Awareness and Advocacy;
  - Education, Health and Nutrition;
  - Camp Management Co-ordination;
  - Food Security and Livelihood;
  - Co-ordination-Logistics-Warehouse Management-Non Food Items and Emergency Shelter, Protection;
  - Environmental and Technological Hazards;
  - Infrastructure Development and;
  - Housing.
4. Each sector is designated a sector lead and co-lead, with sector members. The sector members are selected based on their inherent mandates and comparative advantages.
5. All municipal departments and other key stakeholders are guided by the set of responsibilities in the disaster risk management phases (e.g. prevention, preparedness, mitigation, response and recovery/rehabilitation).
6. This document provides a framework for all sectors to collaborate and guide the implementation of disaster risk management activities that contribute to building community resilience to disasters in Windhoek.
7. Part I of the plan provides guidelines for disaster prevention, preparedness response and recovery.
8. Part II of the plan is the Emergency Management Operation Procedures which guides sequential emergency response activities, through command structures at all levels.
9. With technical guidance of the Disaster Risk Management Division, this plan will be updated regularly to take into account social, economic, organisational and other changes since the development of the initial plan. Part of the updating includes information derived from Community Risk Assessments.

## Contents

ACKNOWLEDGEMENT .....	2
EXECUTIVE SUMMARY .....	3
ABREVIATIONS .....	6
1. INTRODUCTION AND CONTEXT .....	8
2. MISSION .....	9
3. PURPOSE .....	9
4. THE SCOPE .....	9
5. LEGISLATIVE, POLICY AND INSTITUTIONAL FRAMEWORKS .....	9
5.1. LEGISLATIVE FRAMEWORK .....	9
5.2. THE NATIONAL DISASTER RISK MANAGEMENT POLICY-NDRMP (2009) .....	10
6. GUIDING PRINCIPLES OF THE PLAN .....	10
7. STRUCTURE OF THE PLAN .....	10
8. PHASES IN DISASTER RISK MANAGEMENT .....	11
9. INSTITUTIONAL FRAMEWORKS FOR DISASTER RISK MANAGEMENT IN NAMIBIA .....	17
10. SECTORAL APPROACHES TO DISASTER RISK MANAGEMENT .....	18
10.1. EMERGENCY RESPONSE TEAMS (ERT) AND DISASTER RESPONSE TEAMS (DRT) .....	18
10.2. EMERGENCY COMMUNICATION .....	19
11. DISASTER FUNDING .....	19
12. WINDHOEK HAZARD PROFILE .....	20
13. DEMOGRAPHIC CHARACTERISTICS OF WINDHOEK AND KHOMAS REGION .....	23
<i>Table 4: Population Density by area in Windhoek .....</i>	<i>24</i>
14. ROLES AND RESPONSIBILITIES OF CITY DEPARTMENTS AND OTHER STAKEHOLDERS .....	28
15. ROLES AND RESPONSIBILITIES OF OTHER STAKEHOLDERS .....	57
16. CITY OF WINDHOEK DISASTER RISK MANAGEMENT COMMITTEE (DRMC) .....	69
17. THE EMERGENCY & DISASTER RISK MANAGEMENT DIVISION .....	70
18. PRIORITY CROSS-CUTTING ISSUES .....	70
19. ROLES OF INDIVIDUALS, FAMILIES AND COMMUNITIES .....	70
20. PRIVATE SECTOR .....	71
21. TRAINING AND RESEARCH .....	71
22. ROLE OF THE MEDIA .....	71
23. OTHER INSTITUTIONAL FACILITIES .....	72
24. PLAN DEVELOPMENT .....	72
25. PLAN REVIEW .....	72

<b>25.1.</b>	<b>POST DISASTER REVIEW .....</b>	<b>72</b>
<b>26.</b>	<b>DISTRIBUTION .....</b>	<b>72</b>
<b>27.</b>	<b>EMERGENCY MANAGEMENT OPERATIONAL PROCEDURES (EMOP) .....</b>	<b>73</b>
2.1.	PRINCIPLES .....	73
27.2.	OBJECTIVE .....	73
27.3.	PURPOSE OF THE EMOP .....	74
27.4.	WHO WILL USE THE EMOP? .....	74
27.5.	WHEN WILL EMOP BE USED? .....	74
27.6.	SCOPE OF EMOP .....	74
27.7.	EMERGENCY OPERATIONS .....	74
27.8.	INTER-SECTOR AND SECTOR CO-ORDINATION .....	76
27.9.	NOTIFICATION .....	76
<b>28.</b>	<b>EMERGENCY RESPONSE.....</b>	<b>77</b>
<b>29.</b>	<b>RESPONSE PRIORITIES IN A MAJOR EMERGENCY/DISASTER.....</b>	<b>77</b>
29.1.	SELF-PRESERVATION .....	77
29.2.	LIFE-SAVING/PROTECTION OF PROPERTY.....	77
29.3.	UNIT RECONSTRUCTION .....	77
29.4.	EMERGENCY FOOD AND SHELTER.....	77
29.5.	RESTORATION OF INFRASTRUCTURE.....	78
29.6.	RECOVERY .....	78
<b>30.</b>	<b>DECLARATION OF A LOCAL DISASTER .....</b>	<b>78</b>
<b>31.</b>	<b>AUTHORISED OFFICERS FOR A LOCAL DISASTER .....</b>	<b>79</b>
<b>32.</b>	<b>STAND DOWN OF DISASTER RESPONSE.....</b>	<b>79</b>
<b>33.</b>	<b>GLOSSARY OF TERMS .....</b>	<b>80</b>
<b>34.</b>	<b>REFERENCES .....</b>	<b>85</b>
<b>35.</b>	<b>REVISION LOG .....</b>	<b>86</b>

*The Gateway to Endless Opportunities*

## ABBREVIATIONS

Abbreviation	Full Name
BoN	Bank of Namibia
COPPS	Community Oriented Policing and Problem Solving
CoW/The City	City of Windhoek (Municipality)
DMP	Disaster Management Plan
DRMC	Disaster Risk Management Committee
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAS	Emergency Alert System
EMS	Emergency Medical Services
EMOP	Emergency Management Operational Procedures
EOBP	Emergency Operations Basic Plan
EOC	Emergency Operations Centre
EOCT	Emergency Operations Centre Team
EOO	Emergency Operations Organisation
EOP	Emergency Operations Plan
EPI	Emergency Public Information
FCC	Family Contact Centre
GBV	Gender-based Violence
GIS	Geographic Information System
GPS	Global Positioning System
HAZMAT	Hazardous Material
HC	Human Capital

IC	Incident Commander
ICS	Incident Command System
MEOC	Mobile Emergency Operations Centre (Command Vehicle)
MOU	Memorandum of Understanding
MoHSS	Ministry of Health and Social Services
NAMPOL	Namibian Police
NCC	Namibian Communications Commission
NCCI	Namibia Chamber of Commerce and Industry
NDF	Namibian Defence Force
NDP	National Disaster Plan
NDRMF	Namibia Disaster Risk Management Framework
NDRMS	National Disaster Risk Management System
NEMC	National Emergency Management Committee
NEWS	National Early Warning System
NMS	Namibia Meteorological Services
NPDRMN	National Policy for Disaster Risk Management in Namibia
NRCS	Namibia Red Cross Society
NSE	Namibia Stock Exchange
PG	Policy Group
PIO	Public Information Officer
PSAP	Public Safety Answering Point
SACU	Southern African Customs Union
SADC	Southern African Development Community
SE	Strategic Executive
SLA	Service Level Agreement

## PART I

## 1. INTRODUCTION AND CONTEXT

Windhoek is the capital city of the Republic of Namibia and is located in the Khomas Region. Windhoek is the most central town in the country comprising ten (10) constituencies namely: John A. Pandeni, Katutura Central, Katutura East, Khomasdal North, Moses //Garoëb, Samora Machel, Tobias Hainyeko, Windhoek West and Windhoek East and;

Despite these constituencies being situated in the municipal boundaries, they each have different characteristics (i.e. demographically, geographically, politically and economically). Windhoek also comprises major residential areas, large industrial sections and recreational areas and some settlements such as Groot Aub are also situated within the City boundaries.

**The table below depicts Windhoek's population and area sizes:**

**Table 1: Windhoek's Population & Area Sizes**

Urban Locality	Population			Areas in (km <sup>2</sup> )	Density
	Female	Male	Total		
Windhoek	162,800	159,700	322,500	715.8	450.6 people/km <sup>2</sup>

**Source:** Namibia Statistics Agency 2011

At an elevation of 1,725m Windhoek is located in central Namibia within the Khomas Region and is surrounded by mountains. The climate varies from temperatures maximum temperatures of 36.6 degrees Celsius in December to minimums of -3.9 degrees Celsius in August (City of Windhoek Disaster Management Plan 2002). The major highways and rail system between all regions of Namibia converge in Windhoek with the highways accommodating a significant portion of commercial and recreational traffic between the coast, Angola, Botswana and the Republic of South Africa.

As the capital city, Windhoek hosts all the Ministries of National Government, Parastatals and the head offices of most companies operating in the country and the Southern African Development Community (SADC). Representatives of the Foreign Missions, Embassies, the SADC Tribunal and Non-Governmental Organisations are also Windhoek based. The financial centres of Namibia, including the Bank of Namibia (BoN), the head offices of Commercial Banks, the Namibia Stock Exchange (NSE), the Southern African Customs Union (SACU) and the insurance industries are all based in Windhoek.

Windhoek also boasts well-developed infrastructure with sophisticated banking services, advanced telecommunications and excellent road and rail networks and two major highways which facilitate trade, communication and travel with other SADC partners and all major world trade markets. Lastly, Windhoek hosts two airports catering for both domestic and international flights.

## 2. MISSION

*The mission of Disaster Risk Management is to provide an effective programme and plan for the City of Windhoek that includes prevention, preparedness, mitigation, response, rehabilitation and recovery capabilities for disasters and major emergencies. The end goal is to ensure the city's resilience and general public safety.*

## 3. PURPOSE

*This plan identifies methods to preserve life and minimise property and environmental damage, from the effects of natural and/or human-caused (man-made/technological) emergencies and/or disasters. These methods also highlight the importance of co-operation and co-ordination with other public and private entities in pursuit of effective DRM efforts.*

## 4. THE SCOPE

The scope of this plan is disaster risk management throughout all phases and it applies to all departments of the City. The phases are:

- Prevention;
- Preparedness;
- Response;
- Mitigation;
- Rehabilitation and;
- Recovery for All Hazards

## 5. LEGISLATIVE, POLICY AND INSTITUTIONAL FRAMEWORKS

### 5.1. Legislative Framework

The Civil Defence Ordinance No. 3 of 1979, the Civil Defence Act 1986, Civil Defense Proclamation 1978 and accompanying regulations were the disaster risk management legislative frameworks used in Namibia, prior to the promulgation of the Disaster Risk Management Act, Act no. 10 of 2012.

This Plan makes provision for a multi-sectoral approach to disaster risk management. It also guides the development of Departmental, Divisional and sectional plans relevant to disaster risk management – providing a base for a harmonised approach towards disaster risk management within the organisation.

Therefore, all departments are required to keep the City's Disaster Risk Management Committee (DRMC) fully informed of their specialist plans and actual disaster operations in the event of disaster.

### **5.2. The National Disaster Risk Management Policy-NDRMP (2009)**

Disaster risk management in Namibia is guided by the National Disaster Risk Management Policy (2009). The goal of the policy is to attain sustainable development in line with Namibia's Vision 2030, by strengthening national capacities to significantly reduce disaster risk and build community resilience to disasters.

**5.3. The Sendai Framework for Action (2015–2030)** which outlines the various stages for action in disaster reduction including: making it a national and local priority, enhancing early warning, reducing underlying risks and strengthening preparedness.

**5.4. The Africa Regional Strategy for Disaster Risk Reduction (2004) Extended Programme of Action for the Implementation of the Africa Regional Strategy for Disaster Reduction (2006-2015)** which provide national guidelines for disaster risk reduction programming.

In addition to the above, there are key protocols on regional cooperation in terms of integrated disaster risk management in the Southern Africa Development Community (SADC) as well as multilateral agreements on environmental protection that Namibia is signatory to.

## **6. GUIDING PRINCIPLES OF THE PLAN**

This Plan is based on the principles outlined in the National Policy for Disaster Risk Management in Namibia (NPDRMN) and includes the following:

- Fundamental Human Rights and Freedoms;
- Humanitarian principles and codes of practices for humanitarian assistance;
- The shift towards disaster risk reduction;
- Protecting sustainable development gains in Namibia by mainstreaming disaster risk reduction into development and;
- Sustainable ecosystem and environmental management.

## **7. STRUCTURE OF THE PLAN**

The City's Disaster Risk Management Plan (2021) has two sections namely:

- **Part I** which comprises the disaster risk management plan including an all-hazard framework for disaster risk management planning in Windhoek.

- **Part II** which is the Emergency Management Operational Procedures that guide stakeholders on effective emergency responses.

## **8. PHASES IN DISASTER RISK MANAGEMENT**

This Plan provides a holistic approach to disaster risk management, outlining objectives and activities in the prevention, preparedness, response and recovery phases. It also serves as guidance for departmental and divisional contingency plans and highlights the following objectives and activities for disaster prevention, preparedness, response and recovery which are defined as per the United Nations International Strategy for Disaster Reduction (UNISDR) 2009:

### **8.1 Prevention**

The outright avoidance of adverse impacts of hazards and related disasters.

### **8.2 Preparedness**

The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

### **8.3 Mitigation**

The lessening or minimizing of the adverse impacts of a hazardous event.

### **8.4 Response**

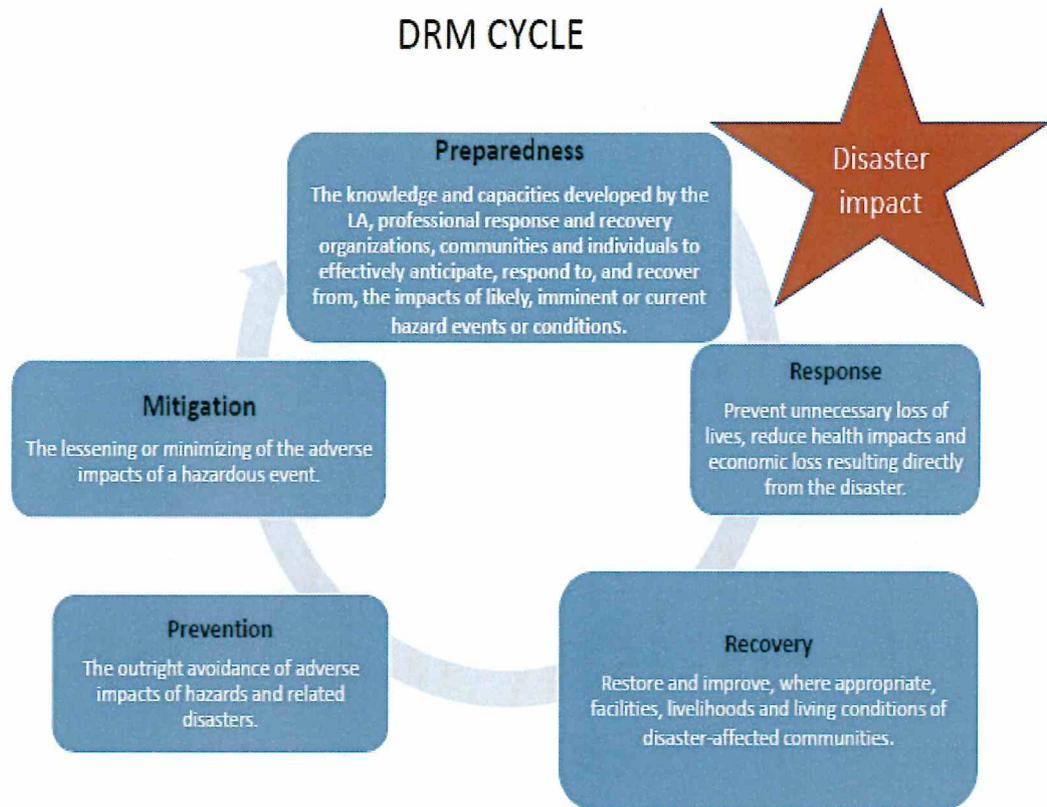
Involves the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs (food, water and sanitation, shelter and protection) of the people affected by disasters.

### **8.5 Recovery and Rehabilitation**

The restoration and improvement, where appropriate of basic services and facilities for the functioning of a community or a society affected by a disaster including efforts to reduce disaster risk factors.

*The Gateway to Endless Opportunities*

## DRM CYCLE



The disaster risk management phases above are further illustrated in an emergency context in **Table 2** below, page 13:



*The Gateway to Endless Opportunities*

Disaster Management	Risk	Prevention	Preparedness	Mitigation	Response	Recovery/Rehabilitation
<b>Objective</b>	To reduce the risks of disasters, by recognising that hazards in Windhoek are imminent and require sustainable ways of living with them.	To enhance municipal capacity for systematic disaster responses, by mitigating the risks and consequences of disasters.	Minimising the adverse effects of a hazardous event.	To prevent unnecessary loss of lives, reduce health impacts and economic loss resulting directly from a disaster.	To restore and improve (where appropriate), facilities, livelihoods and living conditions of disaster-affected communities to pre-disaster levels.	
<b>Activities</b>	<p><b>Risk Assessment</b></p> <ul style="list-style-type: none"> <li>Hazard and risk mapping to identify high risk areas;</li> <li>Vulnerability and capacity assessments;</li> </ul> <p><b>Early Warning</b></p> <p>Establish early warning systems at national, regional and local levels;</p> <p><b>Public Awareness</b></p> <ul style="list-style-type: none"> <li>Awareness-raising on hazards and risks, and likely consequences in times of disaster;</li> <li>Encouraging disaster risk avoidance behaviour in communities;</li> </ul> <p><b>Legislative and Policy Framework</b></p> <p>Building codes, land-use planning, environmental protection laws and regulations;</p> <p><b>Capacity Development and Finance</b></p> <p>Financial and human capital to support disaster prevention activities.</p>	<p><b>Vulnerability Assessment</b></p> <ul style="list-style-type: none"> <li>Vulnerability and capacity assessment</li> <li>Conduct vulnerability and capacity assessment and monitoring hazard threats at community level</li> </ul> <p><b>Early Warning (EW)</b></p> <p>Establish EW mechanisms for all hazards</p> <p>Develop EW mechanisms with clear information and communication flows</p> <p>Develop and disseminate guidelines on EW response at local level</p> <p><b>Capacity Building/Training</b></p> <p>Public education and training of officials, the population at risk, and emergency response teams in DRM</p> <p>Mobilize existing pool of trainers for trainings to be</p>	<ul style="list-style-type: none"> <li>Bridge, Roads and Stormwater Maintenance;</li> <li>Building retaining walls and levees along rivers to keep high water levels out of flood plains.</li> <li>Water regulation (slowing up the rate at which water is discharged from catchment areas) by constructing reservoirs;</li> <li>Increase vegetation cover to slow down run-off;</li> <li>Building sluice systems;</li> <li>Constructing alternative drainage routes (new river</li> </ul>	<p><b>Rapid Assessment</b></p> <p>Rapid multi-sectoral needs assessment of disaster affected communities;</p> <p><b>Protection of Life</b></p> <ul style="list-style-type: none"> <li>Evacuation, search and rescue of at-risk populations, ensuring that family ties are protected and family members traced and reunified if separated during displacement;</li> <li>Protection of affected population from physical abuse;</li> </ul> <p>Security and physical integrity including monitoring and reporting gender-</p>	<p><b>Damage and Loss Assessment</b></p> <p>Damage and community needs assessments;</p> <p><b>Rehabilitation</b></p> <ul style="list-style-type: none"> <li>Restoration of the public health, health care and social services networks to promote resilience;</li> <li>Rehabilitation and reconstruction of destroyed and damaged housing;</li> <li>Restoration of infrastructure systems and services-utilities- energy, water, sanitation, communications, transportation systems, food production and delivery, government facilities,</li> </ul> <p><b>Livelihoods Recovery</b></p> <ul style="list-style-type: none"> <li>Restoration of livelihoods which may include support</li> </ul>	

delivered at local level, and strengthening the local level for rapid response

**Relocation**

Provide support to individuals who wish to relocate to safe spaces

**Contingency Planning**

Contingency planning at all levels – corresponding to all potential hazards – including preparedness plans for evacuation, relocation to safety, and repositioning of resources

**Policies**

Establish policies and standards, organizational arrangements and operational plans to be applied following disasters

**Resource Mobilisation**

Develop an integrated resource mobilization strategy to secure funding in the preparedness phase

Mobilise financial and human resources to support disaster preparedness and response activities – resource mobilisation and earmarked emergency funds.

channels, pipe systems) may prevent river overload;

- Routine Fire Inspections;

- Scrutinising Building Plans;

- Use of technology (CCTV) surveillance;

- Zonal policing (deploying staff) – Easier access to community;

- Intelligence-led policing;

- Road closures;

- Security measures, including protection of vital installations;

- Evacuation of affected populations, including prisoners, when required;

- Sampling and testing;

based violence

**Health Care**

Treatment and care of those injured;

**Emergency Assistance**

Timely provision of shelter, water and sanitation, food, health and non-food items and safe spaces for vulnerable groups

**Infrastructure Protection**

Protection of critical infrastructure and services from damage;

to production projects, income alternatives and employment for vulnerable families: - seed, fertilisers, tools, minor equipment and small animals

- Replacement of lost or destroyed documentation in relation to personal identity, property and land ownership and entitlements (e.g. social protection)

**Psychosocial Support**

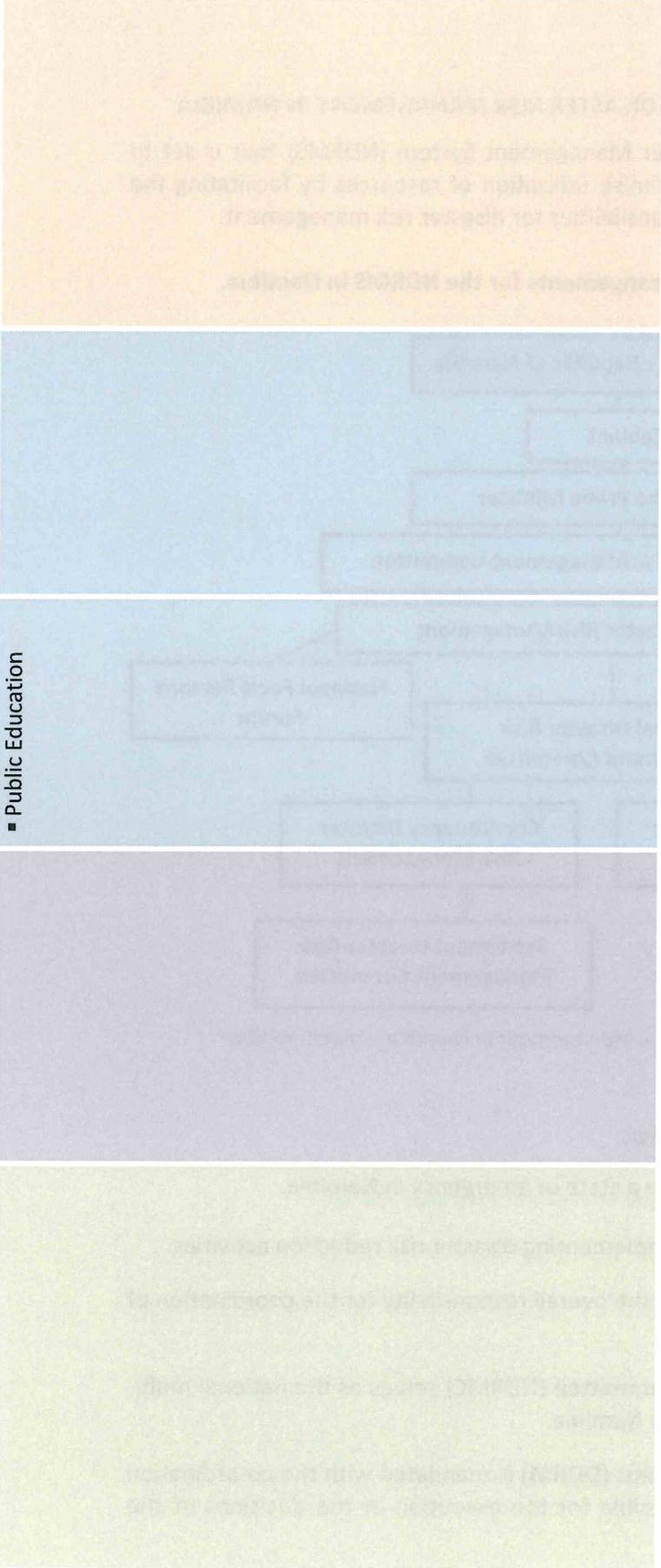
Counselling of disaster affected;

**Resettlement**

Find durable solutions to displacement which may include returning to places of origin, local integration or resettlement.

- Construction compliance;
- Channelling of water (river flow);
- Enforcement of building regulations/ codes requiring fire/wind resistant construction;
- Zoning and land use management;
- Regulate transportation of hazardous cargo;
- Ensure effective traffic flow;
- Flood Management (20-50 Year flood line) as per Local Authority Act;
- Stormwater Management;
- Technical advice to developers and residents;
- Compliance and Enforcement;

Public Education

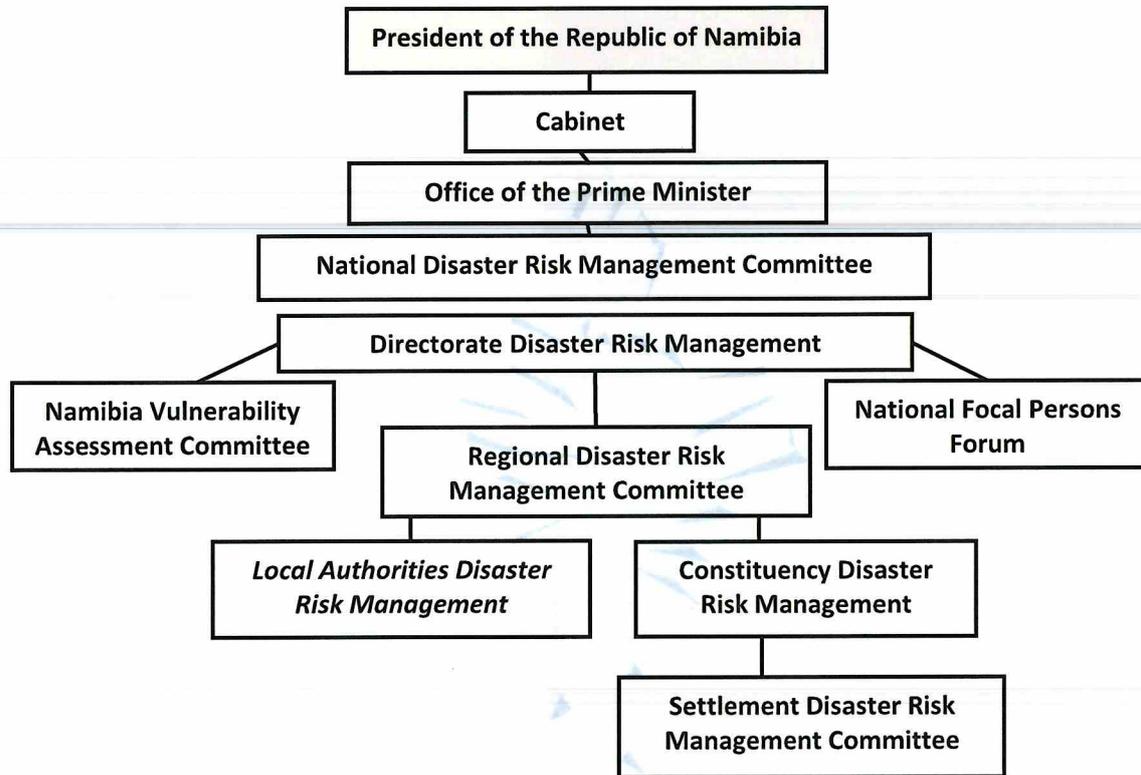


*The Gateway to Endless Opportunities*

## 9. INSTITUTIONAL FRAMEWORKS FOR DISASTER RISK MANAGEMENT IN NAMIBIA

Namibia has established a National Disaster Management System (NDRMS) that is set to minimise duplication of efforts and, to optimise utilisation of resources by facilitating the alignment and integration of roles and responsibilities for disaster risk management.

The figure below shows the institutional arrangements for the NDRMS in Namibia.



**Figure 1:** Institutional framework for Disaster Risk Management in Namibia. Source: NDRMP

The above figure can be summarised as follows:

The **President** is the sole authority to declare a state of emergency in Namibia.

The **Cabinet** allocates resources for use in implementing disaster risk reduction activities.

The **Office of the Prime Minister (OPM)** has the overall responsibility for the coordination of disaster risk management in the country.

The **National Disaster Risk Management Committee (NDRMC)** serves as the national multi-stakeholder platform responsible for DRM in Namibia.

The **Directorate for Disaster Risk Management (DDRM)** is mandated with the co-ordination of disaster risk management and is responsible for the execution of the decisions of the NDRMC.

The **National Focal Persons Forum (NFPPF)** provides a mechanism for multi-stakeholder consultation and coordination of disaster risk management planning and operations.

The **Namibia Vulnerability Assessment Committee** collects vulnerability information.

At regional level, the **Regional Disaster Risk Management Committees (RDRMCs)** serve as the multi-stakeholder platform that is mandated with the co-ordination of disaster risk management amongst all actors involved in disaster risk management.

Every local authority must establish and implement a framework for disaster risk management at local level via the Local Authority Disaster Risk Management Committees (LDRMCs).

The **Constituency Disaster Risk Management Committee (CDRMC)** is mandated with the co-ordination of disaster risk management at constituency level.

The **Settlement Disaster Risk Management Committee (SDRMC)** participates in DRM activities at community level.

## 10. SECTORAL APPROACHES TO DISASTER RISK MANAGEMENT

The municipal Council of Windhoek, as a Local Authority has the ultimate responsibility to protect life, property and environment from the impact of hazards within its municipal area of jurisdiction.

To achieve the above-mentioned constitutional mandate (based on *Article 95 of the Namibian Constitution*), the City's DRMP is aligned to the National Plan and has adopted a sector-wide approach. The sector approach is aimed at creating more coherent and inclusive disaster risk management practices with clearly designated sector-leads<sup>1</sup> and responsibilities that have been agreed.

Sectors also serve as channels of communication and information and one department or division can fit into more than one.

That said, the sector approach does not preclude departments from implementing their inherent/mandated responsibilities. However, departments are encouraged to revert to the sector approach where there are increased opportunities for integrated disaster risk management programming, under the following scenarios:

- When there are threats of disasters and;
- When there is a change of operational mode to crisis or emergency modes.

### 10.1. Emergency Response Teams (ERT) and Disaster Response Teams (DRT)

This plan anticipates the establishment of emergency response teams (ERTs) at divisional and departmental levels and will be deployed to emergency/incident areas to respond to emergency situations. Disaster Response Teams (DRTs) will be established at organisational level. Both teams will be made up of a group of key specialists drawn from various sectors and depending on the nature of the emergency/disaster event, the ERTs will comprise the following:

- Logisticians;
- Health Staff;
- Water and Sanitation experts;
- Social Workers;

---

<sup>1</sup> The sector leads for any given sector is a department or Division not a person. For the purposes of this plan, the department head is ultimately responsible for ensuring that the relevant sector leadership activities are carried out effectively.

- First Aiders;
- Hazardous Substances Specialists;
- Road and Stormwater Engineers;
- Fire Safety Specialists and;
- Any other specialists as the situations demand.

## **10.2. Emergency Communication**

The use of a common communications system is essential for effective communication during an incident and to facilitate information flow between the incident area and the emergency operation centre. Communication systems in emergency operations should include telephones, mobile phones, tele-conferencing, two-way frequency radio communications, satellite systems, Sms' and WhatsApp functionalities.

The choice of communication medium depends on the severity of disaster damage to existing communication facilities. All operational levels should have communication linkages, robust enough to withstand any disruptions due to disasters. Prior arrangements should be made with the Ministry of Defence, Ministry of Safety and Security (NAMPOL), Telecom Namibia, mobile telecommunication companies and any others for the provision of emergency communication equipment.

Furthermore, hotlines should be available in the Emergency Operation Centre (EOC) and all efforts should be made to maintain uninterrupted communication between the field command and the EOC. Additional equipment such as Global Positioning System (GPS) and Geographic Information System (GIS) devices should be availed to assist in mapping exercises.

## **11. DISASTER FUNDING**

Funding for daily risk reduction activities is the responsibility of all departments. However, provision is made for additional contingency funding through the operational budget of the department tasked with the Disaster Risk Management function and the Mayoral Disaster Fund.

During emergency operations, administrative costs (e.g. meals, overtime, etc.) should be borne by individual departments. Therefore, it is important that departments factor in costs and adequate arrangements that arise from assistance they render as part of implementing this plan. Where inadequate financial resources prevent a department from meeting its disaster obligations, requests for financial authorisation are submitted to the Local Authority Disaster Risk Management Committee (LDRMC) for approval.

To ensure mainstreaming of disaster risk management within the City, budget allocations for disaster risk management activities should reflect funding support for disaster prevention, preparedness, response and recovery. Each sector should therefore draw up periodic action plans for disaster risk management activities that include budgets.

The need for funding from central government and the types of assistance needed during emergency operations will be determined once a disaster is declared in line with the relevant provisions of the DRM Act.

## 12. WINDHOEK HAZARD PROFILE

**Windhoek is subject to natural hazards (sudden onset as well as slow onset) such as:**

- Floods<sup>2</sup> (especially flash floods)
- Fires
- High winds
- Storms (hail, lightning) and
- Severe cold/heat resulting in the destruction of life and property as well as the disruption of essential services / utilities (e.g. electricity, water, telephone, sewerage) and infrastructure.

Drought may destroy crops, plant and animal life and cause water shortage<sup>3</sup>/supply problems for the general population. Pest infestations, deforestation and epidemic diseases<sup>4</sup> may occur. Earthquakes are not entirely excluded as Namibia has records of seismic activities. Neighbouring countries have had more serious incidents of earthquakes. A large portion of City of Windhoek's population would be at risk from virtually all of these hazards.

The City of Windhoek is also subject to technological (human-caused) hazards such as fire (especially veld fires), industrial and transportation accidents<sup>5</sup> (e.g. air, rail and road), hazardous material spills, dam failure, deliberate acts of terrorism, civil disorder, explosions, fuel and utilities shortages and utility and information systems failure).

There are also risks associated with the hazardous materials passing through the city on major transportation routes. The potential of a dam failure, a crisis influx of migrants for example, might be unmanageable by the CoW. In addition, environmental pollution (e.g. fresh water, soil, air), global warming (e.g. climate change, temperature rises) and ozone depletion (causing skin cancer, cataracts), all pose as risks.

**Namibia's industrialisation rate poses several incident risks namely:**

- **Chemical and industrial accidents** (e.g. damage to infrastructure, fire, contamination of water, land and animal life, degradation of ecological systems, contamination of food through misuse of chemicals, improper waste management of toxic chemicals, technological systems failure, arson, sabotage) and;
- **Building/structure collapse.**

National defence policy recognises the possibility of a national emergency resulting from the threat of or an attack on Namibia. Furthermore, an international crisis could present the threat of conventional, biological, chemical and/or nuclear weapons. Although the threat of all-out warfare is not impossible, related acts of terrorism<sup>6</sup> using scaled-down weapons appear to be the more probable risk. The probability exists that such acts of terrorism may focus on densely populated areas and infrastructure such as urban areas. In addition, riots, demonstrations, strikes, labour unrest, prison breaks and economic/business interruption may occur.

---

<sup>2</sup> The severe flooding of 1934 and 2004 are good examples.

<sup>3</sup> Case history shows that drought and consequently water shortage, is a constant and severe threat to the community.

<sup>4</sup> The meningitis threat of June/July 2001, and Hepatitis-E of 2018: effectively mitigated by the Ministry of Health and Social Services (MoHSS) and the City of Windhoek, are some examples.

<sup>5</sup> The 1968 Boeing air disaster at Chief Hosea Kutako International Airport, in which 123 of the 128 passengers and crew members on board perished is an example.

<sup>6</sup> The 1999 Caprivi rebellion is an example.

The table below reflects the hazards against Windhoek's response capacity.

**Table 3: Hazards vs. Capacity:**

Orange = Hazards that are unlikely to occur

Green = Hazards that are likely to occur

Red = Hazards that are highly likely to occur

[Contingency plans should be devised for the green and red hazards.]

Hazard Type	Likelihood of Occurrence			Estimated Impact on Public Health and Safety			Estimated Impact on Property			Capacity to Respond		
	Unlikely	Likely	Highly Likely	Limited	Moderate	Major	Limited	Moderate	Major	High	Medium	Low
Flood			x			x		x			x	
Tsunami	x					x			x			x
Cyclones		x				x			x			x
Drought			x			x	x				x	
Landslides	x					x			x			x
Epidemics (Cholera, Rift Valley Fever, Bird Flu, Ebola.)			x			x	x				x	
Veld Fires			x		x				x			x



## 13. DEMOGRAPHIC CHARACTERISTICS OF WINDHOEK AND KHOMAS REGION

### 13.1. Population Growth

The population of Khomas Region grew steadily between the 2001 and 2011 Censuses and reflects a population density of 9.3 persons per square kilometre (km<sup>2</sup>) during that period (2011 Population and Housing Census Regional Profile, Khomas Region). The proportion of the population living in Windhoek was higher than in rural areas (95.2 percent-%) and 4.8%, respectively). At constituency level, Windhoek West accommodated close to 16 % of the total population (53,438) which shows a downward trend from 16.9% of 10 years ago. Only 4.4% of the population (15,121) lived in the Soweto Constituency in 2011, which also declined from 5.5% in 2001.

The annual growth rate for Khomas Region between 2001 and 2011 was 3.1% whereas the annual population growth rate for Windhoek was higher, at 3.3%. However, there was a negative growth of 0.3% in rural areas. At constituency level, Moses //Garoeb recorded the highest growth rate (5.7%) compared to other constituencies.

### 13.2. Household Size

According to the 2011 population and household census, an average household in Khomas Region consisted of 3.7 persons. This represents a decline from 4.2 persons in 2001. The average household size was slightly higher in Windhoek (3.7 persons per household) than in rural areas (3.5). The average household size in Katutura East was the largest of the 10 constituencies, at 4.9 persons per household.

### 13.3. Household Income

Households in the Khomas Region get their income from the following sources:

- Farming;
- Business Activities (non-farming);
- Wages and Salaries;
- Old Age Pensions;
- Cash Remittances;
- Retirement Funds;
- Grants for Orphans and People Living with Disabilities.

Wages and salaries took up the greatest share (72.7%), as an income source in the Khomas Region, across Windhoek and rural areas. The retirement funds and orphan grants reflected the lowest shares (0.8% and 0.2%, respectively). In rural areas, farming (10.1%) and old age pensions (11%) represented a significant share of main income. In Windhoek, non-farming business activities served as a major income source (14.6%). Source: 2011 Population and Housing Census Regional Profile, Khomas Region.

### 13.4. Total Population

The 2011 Namibia Population and Housing Census results indicate that Windhoek had a total population of 319,429 out of the Khomas Region's population of 342,141. Between 2001 and 2011, the population of Khomas Region grew at an average annual rate of 3.1% with the majority of the population (95%), living in Windhoek.

*Table 4: Population Density by area in Windhoek*

NO.	Constituency	Population	Area (km <sup>2</sup> )	Population Density
1.	Tobias Hainyeko	45 912	19	2480.7
2.	Katutura Central	24 608	2	12148.7
3.	Katutura East	18 501	3	7025.3
4.	Khomasdal	43 921	26	1692.5
5.	John A. Pandeni	15 121	2	8030.7
6.	Samora Machel	50 110	19	2607.7
7.	Windhoek East	22 712	167	2607.7
8.	Windhoek West	53 438	209	256.2
10.	Moses //Garob	45 564	33	1397.9

*Source: Khomas Region Multi-Hazard Plan 2016*

### 13.5. Economically Inactive Population

Students constitute the largest share of Windhoek's inactive population (54%), whilst those unable to work due to illness and disabilities, represent the lowest share 3.8% (2011 Population and Housing Census Regional Profile, Khomas Region). A greater proportion of women than men were home-makers 8.8% and 7.7% of all economically inactive women, were pensioners. Males constituted the greater proportion of the economically active population, who are students (56.1%).

Administrative and Support Service Activities employed the largest proportion of the working population, at a rate of 12.8%, followed by Construction with a rate of 11.1% percent. Education, Financial Insurance activities and Accommodation and food serving activities were clearly the domain of women, while men were predominantly employed in the mining, construction and transport sectors.

### 13.6. Human Poverty Index

According to the NSA's Poverty Dynamics Report 2012, the lowest poverty incidents was found in the Erongo Region, followed by Khomas, at 7,1% and 10,7%, respectively. Despite the Khomas Region's second lowest poverty incidence, the region has seen an increase in poverty from 2004 when poverty stood at 8,1%. Khomas' most positive years were those between the 1994 survey and that of 2004, by which time poverty had dropped to the 8,1% figure, from 26,8% in 1994.

### 13.7 Water and Sanitation

According to the 2011 population and household's census, 98.8 percent of the households in Khomas Region had access to safe water. At a constituency level, in Moses //Garob, 48.6 percent of households lacked toilet facilities.

### 13.8 Housing

There are nine types of housing units found in Windhoek namely:

- Detached House;
- Semi-detached/Townhouse;
- Apartment/Flat;
- Guest Flat;
- Part Commercial/Industrial;
- Mobile Home (e.g. caravan, tent);
- Single Quarters;
- Traditional Dwelling and;
- Improvised Housing Unit (e.g. shack).

**Table 5** below indicates that detached houses are the most common types of dwelling units, and account for 42.9% of households in the Khomas Region. The table also shows that detached houses are more common in rural areas and account for 61.3% of this housing unit category, compared to similar housing units in urban areas with 41.9%. The table also indicates that 31.2% of the households in Windhoek live in improvised housing units/shacks.

**Table 5: Percentage Distribution of Households by Housing Unit Type and Area**

Area	Households	Detached House	Semi-detached House	Apartment/Flat	Guest Flat	Traditional Dwelling	Improved Housing Unit (Shack)	Other Housing Unit
Windhoek	84 973	41.9	13.2	9.0	1.7	0.2	31.2	1.2
Tobias Hainyeko	12 428	22.9	4.7	1.6	0.3	0.5	65.8	1.9
Katutura Central	5 096	58.3	18.0	6.8	1.6	1.0	8.3	2.0
Katutura East	3 756	59.6	15.9	13.4	0.8	0.2	6.8	0.4
Khomasdal	10 471	56.7	11.4	10.6	1.2	0.2	17.7	1.2
John A. Pandeni	3 377	57.5	21.5	4.0	7.9	0.1	5.5	1.1
Samora Machel	13 250	32.6	9.4	5.3	0.3	0.2	49.2	0.6
Windhoek East	7 089	51.5	26.0	19.5	0.9	0.2	0.4	1.3
Windhoek Rural	6 330	57.2	9.7	5.4	0.5	1.6	21.0	2.4
Windhoek West	13 837	55.8	16.1	20.3	5.4	0.1	0.2	0.8
Moses //Garob	13 804	22.4	12.1	1.6	0.2	0.1	62.0	1.3

The census indicated that most housing units (33.2%) in the region were owned and occupied by households without a mortgage. These were more common in rural (34.8%) than Windhoek (39.8%). Housing units occupied by owners with mortgages were mainly found in Windhoek (26.3%) and less so in rural areas (6.6%).

### 13.9. Materials Used for Construction

This section presents information on the materials used to construct roofs, walls and floors. These are important indicators of the socio-economic conditions and welfare of households. Most of the materials used can be broadly divided between those that are harvested with labour from local resources (e.g. grass, sticks, mud and dung) and, those that are purchased with cash (e.g. cement bricks or blocks and corrugated iron).

It is indicated that 57.9% of the households resided in dwellings with walls made from cement/bricks. About 60.8% of Windhoek households used cement/bricks for outer walls, compared to 57.7% of rural households. Corrugated iron/zinc was the second most commonly used construction material in both Windhoek (38.7%) and rural areas (29.8%).

At a constituency level, households with walls constructed from corrugated iron/zinc were predominantly found in Moses //Garoeb (78.7%), Tobias Hainyeko (78%), Samora Machel (58.2%) and Khomasdal (48%).

Corrugated iron sheets were the main material used for roofing, covering over 94.1% of households in the region. This trend was observed in Windhoek and rural areas.

### 13.10. Sources of Energy

It is indicated that about 63.9% of households in the Khomas Region relied on electricity as the main.

source of energy for cooking, while about 13.6% used gas. More than 50% of rural relied on wood for cooking, compared to only 5.4% of households in Windhoek. About 15% of households in Windhoek used paraffin/kerosene for cooking. The majority of households in all constituencies (except Tobias Hainyeko, Windhoek Rural and Moses //Garoeb) used electricity from the main grid, as the main source of energy for cooking.

The most common source of energy for lighting in the Khomas Region was electricity from the main grid, used by 67.8% of households. Around 68.5% of the households in Windhoek used electricity from the main grid, while 22.3% of households in rural areas used candles for lighting purposes. Solar energy was not widely used, but played a more important role in rural areas (4.5%) than in Windhoek (0.5%).

At constituency level, electricity from the main electricity grid for lighting dominated in most constituencies with the exception of Tobias Hainyeko (26.7%) and Moses // Garoeb (27.5%), which used mostly candles (52.3% and 48.8%, respectively)

**14. ROLES AND RESPONSIBILITIES OF CITY DEPARTMENTS AND OTHER STAKEHOLDERS**

*Table 6 below show the different department roles and responsibilities as well as sector objectives of the disaster risk management continuum.*

DISASTER RISK MANAGEMENT	PREVENTION	PREPAREDNESS	MITIGATION	RESPONSE	RECOVERY/REHABILITATION
<b>Objective</b>	To reduce the risks of disasters, by recognising that hazards in Windhoek are imminent and finding sustainable ways of living with them.	To enhance municipal capacity for systematic response to disaster, by mitigating the risks and consequences of disasters.	The lessening or minimising of the adverse impacts of a hazardous event.	To prevent unnecessary loss of lives, reduce health impacts and economic loss resulting directly from the disaster.	To restore and improve, where appropriate, facilities, livelihoods and living conditions of disaster-affected communities to pre-disaster levels.
<b>Key Assessments</b>	Risk Assessment	Vulnerability assessment	Needs Assessment	Rapid Assessment Needs Assessment	Damage and loss assessment
<b>DEPARTMENT: OFFICE OF THE CHIEF EXECUTIVE OFFICER (OCEO)</b>					
<ul style="list-style-type: none"> <li>▪ LEGAL SERVICES</li> <li>▪ INTERNAL AUDIT</li> <li>▪ CORPORATE COMMUNICATIONS, MARKETING &amp; PUBLIC PARTICIPATION</li> <li>▪ MAYORAL &amp; COUNCIL AFFAIRS</li> <li>▪ EXTERNAL RELATIONS &amp; NETWORKING</li> <li>▪ OPERATIONS &amp; COMMITTEE SERVICES</li> <li>▪ STRATEGY &amp; ORGANISATIONAL PERFORMANCE</li> <li>▪ SMART CITIES &amp; TRANSPORT</li> </ul>					

## PREVENTION

- Stakeholder co-ordination
- Liaise with diplomatic missions
- Proactive communication: media releases
- Identification of the best/suitable communication channels
- Ensure relevancy of information
- Create alternative communication mediums (e.g. WhatsApp groups, sms', website, Facebook, Twitter)
- Establish Memorandums of Understandings (MOU's) with key stakeholders (e.g. media houses and social networks)
- Mass communication (Mailing lists)

## PREPAREDNESS

- Crises Communication Plan
- Devise a Risk Improvement Plan
- Mayoral Relief Fund
- Business Continuity/Contingency plan
- Customer Outreach Programmes
- Organisational Risk Identification
- Provide legal services to Council and the City of Windhoek's key responders for problems related to disasters and recovery operations.
- Being familiar with Namibian and City of Windhoek regulations, ordinances or acts referring to or relating directly/indirectly to disasters, as well as international laws, treaties and conventions/protocols/agreements ratified by the Namibian Government.
- Review of the basic and related emergency operations plans to determine if there are any legal implications for responsible officials.
- Co-ordinate legal opinions from the Attorney General's Office when needed.
- Identify Disaster Resilience role model cities through networking and sign MoUs with them
- Organisational Performance Assessments

## MITIGATION

- Same as Preparedness

## RESPONSE

- Activate the Crises Communication Plan
- Call emergency Council Meetings
- Implement the Risk Improvement plan

## RECOVERY & REHABILITATION

- Enterprise Risk Management
- Ensure compliance to established standards (national/international standard)
- Business continuity/Contingency plan

## DEPARTMENT: CITY POLICE (CIP)

- CRIME PREVENTION
- TRAFFIC MANAGEMENT
- INFORMATION MANAGEMENT
- HUMAN RESOURCES & FINANCES
- LEGAL SERVICES & POLICY DEVELOPMENT

## PREVENTION

- Ensure the protection of property and possessions left behind by displaced persons against destruction and arbitrary and illegal appropriation, occupation or use;
- Designating a department/division co-ordinator/liaison, to participate in all phases of the City's Emergency and Disaster Risk Management Programme, when necessary, or as requested -one for each discipline;
- Community Oriented Policing and Problem Solving (COPPS): (Awareness creation on municipal by-laws and other statutes, Community engagement, Stakeholder coordination and Establishment of Partnerships)
- Intelligence led policing
- Risk assessment
- Crime mapping
- Signage (e.g. warning)

- Maintenance of law and order
  - Security measures, including protection of vital installations
  - Streamlining of the internal stakeholders’/role clarification.
- MITIGATION**
- Use of technology (CCTV) surveillance;
  - Maintain/safeguard vital installation (infrastructure);
  - Zonal policing (deployment of staff) – easier access to community;
  - Intelligence-led policing;
  - Road closure and traffic control;
  - Security measures, including protection of vital installations;
  - Evacuation of affected populations, including prisoners, when required;
  - Arresting offenders.

**PREPAREDNESS**

- Training and capacity building;
- Public awareness;
- Establishment of Partnerships;
- Intelligence-led policing;
- Standby personnel;
- Simulations exercise/emergency drills;
- Crowd control;
- Maintenance of law and order;
- Security measures, including protection of vital installations;
- Strengthen existing coordinating mechanisms to ensure that the response is timely and coordinated;
- Develop and agree on assessment tools;

- Identify and mobilise resources for permanent (durable) solutions to reduce vulnerability and increase resilience;
- Develop preparedness plan based on identified vulnerabilities, capacities, risks and resources;
- Develop performance benchmarks for protection and specific areas of responsibility including: i) GBV, ii) Child Protection;
- Establish and clearly communicate security plans and procedures to all staff involved in emergency operations;
- Identify stakeholders, services and partners with capacity to identify and address violence, exploitation or abuse;
- Train staff on related issues;
- Build partner capacity to provide multi-sectoral response services including health, psycho-social support, security, legal/justice;
- Regularly update resource inventory (e.g. personnel, equipment and emergency supplies);
- Mobilise resources;
- Establish long-term agreement for procurement of specific supplies

#### RESPONSE

- Road closure;
- Arresting offenders;
- Maintenance of law and order;
- Crowd, traffic and restricted area control;
- Evacuation of affected populations, including prisoners, when required;
- Search and rescue operations for missing people;
- Preservation/protection of evidence at disaster scene;
- Conduct emergency operational risk assessment;
- Provide security and protection in areas evacuated during emergency operations;
- Enforce restriction of access to areas identified as high risk;
- Support community-based protection mechanisms and secure safe environments for all vulnerable groups including women, children, older persons, and people with disabilities or chronic illnesses;
- Provide safety and security for staff, supplies and equipment used in emergency operations;
- Ensure gender appropriate security at camps (if people have been relocated);

- Report any safety or security incidents.

#### **RECOVERY & REHABILITATION**

- Maintenance of law and order;
- Referrals;
- Safeguard the scene of incident;
- Security measures, including protection of vital installations.

#### **DEPARTMENT: ECONOMIC DEVELOPMENT & COMMUNITY SERVICES (EDCS)**

- EMERGENCY & DISASTER RISK MANAGEMENT
- ECONOMIC DEVELOPMENT
- HEALTH & ENVIRONMENT SERVICES
- PARKS & GARDENS
- SOCIAL & YOUTH DEVELOPMENT

#### **PREVENTION**

- Conduct public awareness and campaigns, community meetings and outreach programmes via print and electronic media;
- Development of an Advocacy Strategy for Disaster Risk Reduction– adapted to target audience at all levels;
- Identify core advocacy concerns, including resource requirements and contribute key messages to broader disaster risk reduction;
- Build community response capabilities;
- Develop hazard monitoring and early warning services up to the community level;
- Promote diversification of livelihoods;
- Promote sustainable natural resources management e.g. conservation of underground water;
- Mobilise financial and material resources;
- Information dissemination - safety tips for tourists;
- Identify risky areas/crime hot spots for tourists;
- Events management to ensure big mass events do not occur on the same dates;

- Climate Risks (emission of gasses);
- Law of biodiversity (e.g. controlling wood harvesting);
- Land-use allocation;
- Noise pollution control;
- Conduct risk and capacity assessments for the sector;
- Enforce the control of development in environmentally fragile areas;
- Conduct geological and hydrological mapping;
- Integrate disaster risk assessment into environmental impact assessments and the review of environmental protection laws;
- Institute polluter-pays-principle;
- Develop a natural resource management plan including identification of environmentally sensitive area;
- Construct, maintain and monitor fire breaks;
- Undertake Environmental Audits to provide mitigation measures against disasters;
- Develop appropriate mitigation measures for potential pollution arising from catastrophes or incidents;
- Integrate disaster risk reduction into climate change adaptation;
- Conduct risk and vulnerability assessments, diseases and nutrition surveillance;
- Prevent and control communicable diseases including HIV and AIDS;
- Promote an integrated, comprehensive, multi-sectoral and multi-disciplinary approach to reduce the impact of natural, technological or man-made hazards on public health;
- Strengthen municipal strategies and plans to address all forms of social disadvantage and vulnerability that have a negative impact on health;
- Planting trees to prevent soil erosion;
- Physical protection, informed planning, environmental stewardship, disaster-resilient design and construction of Early Childhood Development (ECD)
- Advocate for safe structures and secure education environment;
- Ensure preventive maintenance of ECD buildings and non-structural safety measures;
- Integrate basic disaster risk reduction measures in the ECD curricula;
- Permanent relocation of vulnerable ECD centres to safe and less vulnerable locations;
- Promote diversification of livelihoods e.g. non-agricultural income generating projects;

- Mobilise financial and material resources;
- Co-ordinate mainstreaming of DRR into all departmental plans.

#### PREPAREDNESS

- Conduct a city-wide community risk assessment and hazard mapping exercise;
- Produce disaster risk management awareness materials;
- Collect, analyse and disseminate early warning and risk information from all departments and ensure that it is clearly communicated to the communities;
- Raise the profile of DRR among policy makers and senior management;
- Identify institutions with required items, services or supplies and make arrangements to secure these during emergencies;
- Consolidate information on poverty assessment, vulnerability forecasts, population surveys and package it for dissemination to the public;
- Co-ordinate the development of departmental contingency plans;
- Plan and monitor DRM activities carried out by all departments;
- Collate, analyse, update and disseminate disaster triggers<sup>7</sup> from various specialists units;
- Mobilise resources for sector activities;
- Have a standby team at any given time;
- Conduct in-house and specialised training;
- Conduct disaster and emergency drills/simulation exercises;
- Advocate for reservation of land for building of Disaster Management facilities in new township developments;
- Upgrade/modernise call centres to be able to deal with multiple incidents;
- Procurement of up-to-date disaster management information systems;
- Implementation of the Incident Command System (ICS);
- Devise mechanisms for information dissemination and awareness raising in local communities including sms', WhatsApp, community radio; etc.;
- Ensure community based early warning systems are reinforced and integrated with conventional early warning;

<sup>7</sup> Indicators used to determine the thresholds that show whether a community is being subjected to unusual stress requiring management actions (activation of disaster preparedness/contingency plans and request for emergency resources e.g. critical price thresholds in market, response strategies seen in times of stress e.g., increased population migration to different areas for work, pulling children out of school, dietary substitution strategies.

- Establish platforms for information sharing within the organization and community levels are established;
- Monitor disaster triggers and disseminate information to stakeholders;
- Regularly update resource inventory (personnel, equipment and emergency supplies);
- Promote a simplified trade regime during periods of food crisis;
- Conduct market analysis;
- Develop an Events Management Strategy/By-Law;
- Erect tourist safety awareness notice boards at strategic areas around the city;
- Enforce law of biodiversity;
- Develop and agree on assessment tools;
- Establish mechanisms to monitor adverse environmental condition- soil erosion, fire outbreaks, environmental pollution –land, water, air;
- Initiate or advise sectoral environmental protection and environmental conservation programmes;
- Develop systems for the control and containment of chemical spills and hazardous substances on transportation routes;
- Plan for the mobilisation of resources (finance, human and material) for cleaning and recovery, environmental protection and conservation programmes;
- Regularly update resource inventory (personnel, equipment and emergency supplies);
- Train Hazard Materials Emergency Response Team;
- Partake in the training of community fire prevention and control committees;
- Conduct public education and awareness programmes to sensitise the community on wild land fires and related issues;
- Develop guidelines for handling hazardous materials;
- Develop guidelines for de-contamination;
- Monitoring and evaluation of sector’s programmes (Environment related);
- Conduct and map health facilities vulnerability assessment and capacities;
- Develop and agree on disaster assessment tools;
- Conduct Epidemiological Surveillance;
- Develop Health sector contingency plan;
- Establish epidemic thresholds;
- Identify organisations with required items, services or supplies and make arrangements to secure these during emergencies;

- Prepare guidelines for diagnosis, treatment and management of disease with potential for epidemics;
- Conduct health campaigns to raise awareness of disease outbreaks and promotion of positive health practices;
- Conduct nutrition surveillance and management of moderate and severe malnutrition;
- Regularly update resource inventory (personnel, equipment and emergency supplies);
- Engage ECD administrators, staff, and parents in ongoing community disaster prevention activities;
- Advocate for an emergency component in ECD sector plans and budgets, including preparedness plans;
- Develop minimum standards/kits for ECDs;
- Identify organisations with required items, services or supplies and make arrangements to secure these during emergencies;
- Develop and track appropriate early warning signs and triggers for disasters in the EDC sector;
- Train teachers/caretakers in disaster risk management;
- Establish EDC committees to promote health and safety in the EDC sector;
- Establish policies for compensation of lessons for students whose education has been disrupted by disasters;
- Make arrangements for alternative relocation for high risk centres;
- Conduct school disaster drills or simulation exercises once a year;
- Develop systematic baseline and pre-crisis food security information as a basis for continuous assessment, monitoring and evaluation in areas prone to recurrent disasters and protracted crisis;
- Monitor the National Information and Early Warning System for Food and Agriculture (Ministry of Agriculture, Office of the Prime Minister)
- Supports communities to develop abilities to cope with natural hazards through the use of early warning systems;
- Promote a simplified trade regime during periods of food crisis;
- Support community risk and vulnerability and capacity assessments;
- Conduct market analysis;
- Waste Water Pollution inspections.

#### **MITIGATION**

- Surveying and Code Law Enforcement in occupied buildings;
- Scrutinising of Building Plans;
- Building code law enforcement;

- Inspections on buildings under construction and on completion to establish compliance with fire safety requirements;
- Prevention through Community Education;
- Routine Fire Inspection and Surveying on buildings;
- Identify tailor-made systems for informal settlements;
- Advocate (play an active role) for the formalisation of informal settlements and provision of basic services;
- Creation of firebreaks;
- Adhere to clean development technology in line with the national framework and strategic environment policy;
- Implement Sand Mining Policy (attenuation);
- Rehabilitation of mining sites;
- Pruning of trees;
- Provision of public open spaces;
- Implement National Forest Policy;
- Implement Public Parks Act.

#### RESPONSE

- Engage in and take the lead in emergency search and rescue operations;
- Take lead in fire related activities;
- Take lead in medical and hazardous operations;
- Disseminate early warning information linked to forecasting systems to departments, identified key DRR stakeholders and the public;
- Prepare press statements and media conferences on disaster events at hand;
- Monitor early warning and disaster triggers;
- Consolidate disaster risk management reports and update situation reports;
- Activate the Emergency Command Centre (ECC);
- Conduct emergency risk assessments;
- Liaise with Police to ensure effective crowd management;
- Relay information on declaration of state of emergency;
- Conduct market analysis;

- Ensure treatment and health care of people exposed to chemical and hazardous substances and other technological hazards;
- Decontaminate environments contaminated by chemicals and hazardous substances;
- Clean up contaminated sites;
- Protect communities including workers from exposure to chemicals and hazardous substances;
- Issue fines for noise pollution;
- Enforce environmental management plan (impact assessment plan);
- Promote and protect the health and well-being of affected communities, paying particular attention to the specific needs of vulnerable groups;
- Ensure mass casualty treatment and case management;
- Conduct disease surveillance and strengthening of health service delivery;
- Dissemination of key health education and promotional messages and behaviour-change communication to affected populations on diseases vector control, immunisation including food and water quality monitoring;
- Ensure PLWHA and other chronic illnesses receive uninterrupted treatment;
- Promote safe delivery of reproductive health services;
- Conduct nutrition surveillance and management of moderate and severe malnutrition;
- Debris removal;
- Respond to life threatening trees;
- Rapid assessment to determine magnitude – number of children affected, availability of teachers and facilities;
- Resume education activities by setting up safe temporary learning spaces or shift system in host communities;
- Maintenance and record taking of centres, teacher and student information;
- Provision of educational supplies;
- Mobilise psycho-social support for teachers (provide training/orientation) and learners (provide recreational activities and where appropriate establish links to basic health and nutrition services);
- Provide life skills programmes: peace education, basic health, nutrition, and hygiene promotion;
- On receipt of official warning, ensure that centres are closed where necessary, and that the safety of children is promptly attended to;
- Provide emergency assistance to disaster affected EDCs;
- Identify separated/lost children and provide appropriate care;

- Provide timely emergency relief to identified affected populations;
- Ensure the supply and distribution where possible of culturally and socio-economically appropriate essential household items to affected populations;
- Conduct market analysis;
- Assess the range of potential response options for improving the short and long term situation, as well as implementation requirements;
- Identify and set up operational requirements and systems, including advocacy and fund raising;
- Ensure effective response is operationalised to ensure desired impact;
- Ensure the impact of response is monitored and evaluated;
- Map affected areas;
- Conduct health and hygiene education;
- Establish community water and sanitation committees;
- Immediate clean-up and removal of hazardous material;
- Fine the polluter to retain cost.

#### **RECOVERY & REHABILITATION**

- Highlight the disaster recovery needs through public media;
- Disseminate reports on disaster recovery programmes;
- Report on community perceptions that help shape disaster recovery;
- Assess community needs in disaster recovery;
- Provide support in resource mobilization for departmental recovery programmes;
- Collate and disseminate good practices and lessons learned;
- Monitor recovery programmes;
- Together with Food security and livelihood sector, support livelihood opportunities for displaced populations in the early recovery phase;
- Establish co-ordination mechanisms for partners involved in disaster recovery;
- Mapping of damage and destruction for disaster-affected communities;
- Support production projects, income alternatives and employment for vulnerable families whose economies were affected by disasters;
- Promote diversification of livelihoods;
- Introduce a food or cash for work public works programme;

- Rehabilitate and decontaminate environment contaminated by industrial, mining and hazardous substances;
- Rehabilitate people exposed to chemicals and hazardous substances;
- Clean up and recovery after chemical or hazardous substances accidents;
- Initiate a gap analysis of local capacities in health and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction;
- Assess community capacity and resources for recovery;
- Assess psychosocial impact of disaster among affected communities;
- Provide psychosocial support and counselling services to communities in need;
- Provide supplementary and therapeutic feeding for children at risk of malnutrition;
- Utilise reconstruction policy to ensure standards for safety (to build back better), right-sizing (building to relevant standards), right-siting (relocation, land use, and master planning);
- Develop and agree on disaster assessment tools;
- Assess damages to EDC infrastructure including water and sanitation facilities, school equipment and learning resources;
- Mobilise resources for rehabilitation of damaged infrastructure and replacement of damaged learning resources;
- Assess psycho-social impact of disaster among affected learners and provide appropriate counselling;
- Develop reconstruction policy to ensure standards for safety (to build back better), right-sizing (building to relevant standards), right-siting (relocation, land use and master planning);
- Advocate for a disaster risk reduction component in EDC sector plans and budgets;
- Initiate a gap analysis of local capacities in EDC and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction;
- Conduct post disaster damage and loss analysis for the productive sectors;
- Support production projects, income alternatives and employment for vulnerable families whose economies were affected by disasters.

**DEPARTMENT: ELECTRICITY (ELE)**

- TECHNICAL SUPPORT
- DISTRIBUTION
- PROTECTION & SYSTEMS

- COMMERCIAL SERVICES
- ENGINEERING SERVICES
- NETWORK OPERATIONS & MAINTENANCE)

**PREVENTION**

- Use of technology by remote monitoring of the system;
- Planning of infrastructure according to safety standards;
- System maintenance in line with set standards;
- Inspections of electrical installations before supplying permanent power;
- Use of protective devices in the electrical network;
- Regular capacity building (training) to ensure competent personnel;
- Provision for redundancy in the network;
- Demand side management;
- Public education;
- Personnel on standby to monitor the system.

**MITIGATION**

- Safeguard electrical equipment (controlled access);
- Demand side management;

**PREPAREDNESS**

- Regular capacity building (training) to ensure competent personnel;
- Provision for redundancy in the network;
- Ensure that a power purchase agreement is in place with NAMPOWER;
- Ensure continuity of supply.

**RESPONSE**

- Making incident sites electrically safe;
- Restore electrical power supply, where possible - according to priority analysis;

- Public education;
- Formal response plan for various incidents;
- Minimum stock level.

#### **RECOVERY & REHABILITATION**

- As the need dictates

#### **DEPARTMENT: FINANCE AND CUSTOMER SERVICES (FIN/FCS)**

- PROCUREMENT MANAGEMENT UNIT & LOGISTICS
- REVENUE MANAGEMENT
- FINANCIAL REPORTING
- DEBT & RISK MANAGEMENT
- CASH MANAGEMENT
- CUSTOMER SERVICES
- FLEET MANAGEMENT

#### **PREVENTION**

- Training of staff

#### **MITIGATION**

- Mainstream financial management in all City operations.

#### **PREPAREDNESS**

- Training of staff members in emergency management (e.g. how to handle angry crowds);
- Ensure the necessary procedures are in place during emergencies for procurement of goods, services- which are not subject to the *Procurement Act of 2015 (Procurement)*;
- Register donated emergency assets (e.g. Costing & Budgeting, Asset Management);
- MOU's (e.g. for fuel supply);

- Establish Service Level Agreements (SLA's);
- Contribute to Mutual Aid Agreements;
- Devise sectoral response plans for all divisions;
- Co-ordination of Resource Mobilisation;
- Training of non-finance officials in financial management (to be able to invoice external stakeholders correctly);
- Mobilise resources for activities for the sector;
- Develop a commodity tracking mechanisms;
- Establish a distribution co-ordination mechanism;
- Identify possible bottlenecks in supply chain and make adequate arrangements to reduce the flow of emergency supplies;
- Conduct who has what where;
- Mobilise air and road transport for delivery of emergency supplies and evacuation and relocation of affected people;
- Develop security arrangements for warehouse during delivery and distribution of emergency supplies;
- Train sector staff in logistics and warehouse management;
- Establish link to facilitate for customs clearance for emergency supplies from outside Namibia;
- Identify organisations with emergency items, services or supplies and make arrangements to secure items like water tankers, tents, blankets during emergencies;
- Map shelter and Non-food Items inventory;
- Plan for transportation and distribution of equipment and emergency items for prevention and control of environmental disasters;
- Regularly update resource inventory (equipment and emergency supplies);
- Conduct simulations exercises;
- Monitor and evaluate sector's programmes.

#### **RESPONSE**

- Ensure co-ordination of activities before, during and after disasters;
- Support search, rescue and evacuation of vulnerable communities;
- Provide administration and finance support to facilitate emergency response operations;
- Liaise with relevant sector in providing shelter for the displaced;

- Deliver appropriate supplies, in good condition, in the quantities required and, at the places and time they are needed;
- Establish mechanisms for commodity tracking and warehouse management;
- Provide support for emergency communication equipment and facilities to ensure flow of information during emergency operations.

#### **RECOVERY & REHABILITATION**

- Support the transportation of households resettled from high risk zones;
- Support the delivery of materials, equipment and personnel for rehabilitation;
- Obtain and process insurance claims after emergency situations;
- Assist as and where needed.

#### **DEPARTMENT: HUMAN CAPITAL & CORPORATE SERVICES (HCCS)**

- ORGANISATIONAL DEVELOPMENT & HUMAN RESOURCES DEVELOPMENT
- STAFFING & REMUNERATION
- LABOUR RELATIONS
- OCCUPATIONAL HEALTH, SAFETY & WELLNESS
- CORPORATE & PROTECTION

#### **PREVENTION**

- Hiring, recruitment and capacity building of staff members;
- Assess hazardous/unsafe situations and develop measures for ensuring personnel safety, as appropriate;
- Provision of security to the City's movable and immovable assets and other vital installations;
- Safe and secure record-keeping;
- Mapping of available financial and human resources, as well as skilful people, to mobilise for displacement prevention.

#### **MITIGATION**

- Ensure safe working environment;
- Capacity building of staff members;
- Surveillance (use of appropriate technology).

## PREPAREDNESS

- Capacity building (specialised courses);
- Participate in the review of emergency operations plans when needed, to avoid liability incidents when an emergency situation occurs;
- Awareness raising and education;
- Simulation.

## RESPONSE

- Ensure employees are working safely during response;
- Render needed advice on the welfare of employees responding to the disaster;
- Establish a "Family Contact Centre (FCC)" to determine the safety/status of the families of employees working in emergency/disaster response.

## RECOVERY & REHABILITATION

- Render post traumatic counselling of municipal employees as needed
- Implement Business Continuity Plan

## DEPARTMENT: INFRASTRUCTURE, WATER & TECHNICAL SERVICES (IWTS)

- BULK WATER & WASTE WATER
- SCIENTIFIC SERVICES
- BUILT ENVIRONMENT
- ENGINEERING SERVICES
- SOLID WASTE MANAGEMENT
- ROADS & STORMWATER

## PREVENTION

- Conduct risk and vulnerability assessments;
- Consider hazard risk in siting and construction of sewage and water treatment facilities;
- Protect primary water sources, sanitation, sewage and water treatment facilities from disaster damage;
- Establish and enforce policies and standards for construction of water and sanitation facilities;
- Diversion of storm water.

- Sampling and testing – water sampling point and select appropriate tests;
- Ensuring/measuring compliance (water quality) – to National and International Water Quality Standards;
- Water treatment;
- Maintenance of infrastructure – co-ordination;
- Ensure construction compliance (standards) – flood prevention;
- Address health and safety issues through maintenance of physical infrastructures;
- Water resources and source protection;
- Integrate disaster risk assessment in the planning and construction of Capital Projects and related infrastructure;
- Conduct preventive maintenance of public infrastructure;
- Conduct risk and vulnerability assessments and risk mapping: (generic for all departments) Advice Integrate disaster risk assessment into environmental impact assessments in infrastructure developments;
- Control the transportation of waste by licensing the transporters of waste;
- Ensure Windhoek’s cleanliness especially, in stormwater pathways such as catch pits, river beds;
- Prevent/limit unauthorised entry to waste disposal and transfer sites in order to prevent the consumption of hazardous material;
- Ensure sufficient provision of waste disposal facilities;
- Monitoring of boreholes downstream of landfill sites in order to monitor contamination levels;

#### **MITIGATION**

- Storm water accommodation, issuing of alerts (possible water contaminations);
- Sampling and testing – water sampling point and select appropriate tests;
- Construction compliance (building control).

#### **PREPAREDNESS**

- Develop and agree on disaster assessment tools (generic for all departments);
- Develop sector contingency plan with budget and supply needs and where possible, **stock** essential sanitation and hygiene supplies, water supplies, purification technologies and chemicals, and tools;
- Establish long-term agreements for procurement of specified WASH supplies, assess local market for potential water-trucking capacity, and ensure the availability of water delivery partners and agreement on methods and standards;

- Ensure capacity for construction of temporary latrines;
- Provision of on-going sanitation facilities
- Train sector staff in water and sanitation aspects;
- Monitor and evaluate sector programmes;
- Plan for the mobilization of resources (finance, human and material) for rehabilitation of damaged infrastructure and housing;
- Accommodation of storm water;
- Demarcation of water sampling points;
- Water banking (aquifer) drought – ensure water security;
- Stakeholder co-ordination (meetings);
- Ensure water supply continuity;
- Identification of hot spots/zones (floods, contamination and security);
- Send out Alert notification;
- Manage flooding hot spots;
- Outline various life-line structures/infrastructure (e.g., bridges, roads,) and also highlight the arrangements for the maintenance and management of these structures during disasters;
- Water storage capacity for the city;
- Develop and agree on assessment tools;
- Assess hazard risks and map infrastructure at risk of damage from hazards;
- Plan for the mobilisation of resources (finance, human and material) for rehabilitation of damaged infrastructure and housing;
- Monitoring and evaluation of sector’s programmes;
- Devise hazard damage assessment mechanisms and test these and train assessment teams on how to use tools appropriately;
- Regularly update resource inventory (personnel, equipment and emergency supplies);
- Preparation in accordance with the approved Hazardous material response plan;
- Development of a disaster debris disposal plan;
- Agreements with equipment leasing companies to assist in event of a disaster;
- Monitor and evaluate the disposal capacities of landfill sites to receive debris;

- Conduct drills or exercises to assess preparedness.
- RESPONSE**
- Conduct rapid disaster needs & damage assessment;
  - Restore access to municipal markets
  - Provide infrastructure for water supplies and temporary bridges where required;
  - Construct new water points - including emergency water treatment systems;
  - Ensure/support water trucking;
  - Construct emergency latrines;
  - Support household water treatment and storage;
  - Test water quality and support water purification;
  - Conduct rapid assessment to assess damage to the water and sanitation facilities;
  - Provide emergency water supplies and sanitation facilities;
  - Conduct disaster damage assessment;
  - Sampling of water (pipe burst);
  - Water treatment;
  - Activate drought response plan;
  - Early warning system (dams' levels, river flows);
  - Opening of sluice gates;
  - Booms/drifts at hot spots;
  - Storm (river flow);
  - Pumping of boreholes where contamination has occurred;
  - Secure storage reservoirs and boreholes;
  - Immediate Clean-up of debris in accordance with the Debris Management Plan.

## RECOVERY & REHABILITATION

- Develop a recovery framework for the sector using the damage assessment findings;
- Support rehabilitation of damaged homes and public infrastructure;
- Provide technical advice on the rehabilitation of critical infrastructure (telecommunication, electricity, water and sewage reticulation);
- Support the construction of flood and fire resistant housing;
- Establish coordination mechanisms for partners involved in disaster recovery;
- Promote **build back better** during rehabilitation of damaged infrastructure and housing;
- Develop a water and sanitation recovery framework;
- Mobilize resources for rehabilitation of damaged water and sanitation, sewage and water treatment facilities;
- Mobilize communities to participate in water and sanitation recovery;
- Initiate a gap analysis of local capacities in water and sanitation, and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction;
- Protect rehabilitated water and sanitation facilities from future disaster damage;
- Re-designing of infrastructures.

## DEPARTMENT: INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

- ICT GOVERNANCE & SECURITY
- ICT SERVICE MANAGEMENT
- ICT CORE TECHNOLOGY INFRASTRUCTURE
- BUSINESS SYSTEMS & INFORMATION MANAGEMENT

## PREVENTION

- Data protection by creating a disaster recovery site;
- Data replication;
- Effective fire walls;
- Up-to-date anti-virus software;

- Establish network security;
- Establish data security;
- Establish uninterrupted power supply system (e.g. UPS, generator);
- Identify critical network connections;
- Establish an alert/notification system (e.g. sms, email, WhatsApp, environmental monitors for systems).

#### **MITIGATION**

- Maintain business continuity for the whole ICT infrastructure;
- Data security (backup system);
- Maintain network security;
- Ensure redundancy for critical network connections;
- Carry out preventative maintenance regularly;
- Environmental monitoring for systems.

#### **PREPAREDNESS**

- Develop and review ICT policies and procedures based on international best practices;
- Test backup systems on regular basis;
- Maintain the backup power system;
- Development of a Business Continuity Plan
- Training of staff members.

#### **RESPONSE**

- Activate the standby response team;
- Assess the situation;
- Call for further assistance if need be;
- Liaise with relevant stakeholders;
- Restore systems and data;
- Business Continuity Plan implemented to replicate data/system.

## RECOVERY & REHABILITATION

- Identify the cause and take corrective measures;
- Review policies, processes and procedures to ensure resilience and sustainability;
- Document incident to ensure resilience and sustainability.

## DEPARTMENT: HOUSING, PROPERTY MANAGEMENT & HUMAN SETTLEMENT (HPMHHS)

- HOUSING & LAND DELIVERY
- VALUATIONS
- PROPERTY MANAGEMENT
- GEOMATICS
- HUMAN SETTLEMENT

## PREVENTION

- Conducting risk and vulnerability assessments, needs assessment of most-at-risk populations;
- Mapping of disaster-prone areas and low-risk areas for possible relocation, e.g. higher ground;
- Mainstream concepts of early warning linked to population displacement and relocation as a prevention measure, developed and adapted to local level respectively;
- Raise awareness and support most-at-risk communities on options for relocation to low-risk areas;
- Undertake feasibility studies, master plans and housing infrastructure projects;
- Integrate disaster risk assessment in the planning and construction of Capital Projects and related infrastructure;
- Implement disaster assessment tools;
- Implement working response mechanism;
- Upgrade housing in informal settlements to reduce hazard risks;
- Discourage settlement in high-risk zones;
- Regularly update resource inventory (personnel, equipment and emergency supplies).

## PREPAREDNESS

- Implement life-line structures/infrastructure (e.g. bridges, roads, school buildings, hospitals, communication network) and highlight the arrangements for

the maintenance and management of said structures during disasters.

- Implement assessment tools;
- Assess suitable land for relocation of at-risk communities;
- Produce customised maps as needed.

#### **MITIGATION**

- Identification of reception area;
- Participate in relocation;
- Engage stakeholders for assistance.

#### **RESPONSE**

- Participate in identifying temporary shelter options in host families or relocation centres;
- Establish and maintain regular registration and monitoring system in the relocation centres – including training of registration staff;
- Establish community water and sanitation committees;
- Distribute water containers and water treatment tablets/sachets to affected communities
- Implement minimum generic standards;

#### **RECOVERY AND REHABILITATION**

- Support the construction of flood and fire resistant housing;
- Promote build back better during rehabilitation of damaged infrastructure and housing;

#### **DEPARTMENT: URBAN & TRANSPORT PLANNING (UTP)**

- ROADS PLANNING, DESIGN & TRAFFIC FLOW
- URBAN PLANNING
- SUSTAINABLE DEVELOPMENT
- BUILDING CONTROL

## ▪ PUBLIC TRANSPORT

### PREVENTION

- Devise suitable by-laws to enhance safety of the building;
- Advise the public on matters related to the Building Industry in line with the municipal by-laws;
- Enforce the building codes and control of development in high risk areas;
- Advise the public on matters related to the Building Industry in line with the municipal by-laws;
- Formulate technical (civil engineering related) standards applicable to roads industry and other modes of transport (Urban Planning);
- Initiate discussions on relocation of people settled in hazard-prone locations to safer locations (Urban Planning & Property);
- Facilitate land access for Orphans and Vulnerable Persons– OVPs (e.g. women-headed households, the elderly and other vulnerable or minority groups)- (Urban Planning & Property Management);
- Discourage settlement in high-risk zones (Urban Planning & Property);
- Enforce building codes and control of development in high-risk areas;
- Undertake feasibility studies, masterplans and design of transport, housing infrastructure projects;
- Flood management (20-50 years) – to ensure natural flow of water;
- Planning and design of roads according to hierarchy (categorisation);
- Design Township Layouts in line with the Spatial Development Plan
- Ensure that building plans are in compliance with set standards;
- Awareness creation and public engagement;
- Stakeholder engagements (e.g. Engineering Council);
- Building control and land-use (industrial – hazardous industries – compliance);
- Identify and create a safe environment for bus commuters (infrastructure, busses);
- Create adequate and safe bus shelters, bus stops, taxi ranks;
- Ensure roadworthy busses that are equipped with emergency response equipment (e.g. first aid kits, fire extinguishers and first aid-trained bus personnel);

- Provide safe non-motorised transport facilities;
- Traffic Control Planning.

#### MITIGATION

- Training of personnel;
- Enforcement of building regulations;
- Zoning and land-use management;
- Ensure effective traffic flow;
- Flood management (50 years flood line) as per the Local Authority Act;
- Technical advice to developers and residents;
- Compliance and enforcement;
- Public education;
- Road safety audits.

#### PREPAREDNESS

- Advise on risks/hazards;
- Planning and designing (new infrastructures);
- Road layout/plan;
- Structural planning (Structure Plan);
- Issue compliance certificates;
- Ensure storm water provision in all building projects;
- Stakeholder collaborations;
- Ensure by-law adherence with the support of the City Police;
- Restrict building in hazardous zones;
- Town planning scheme (e.g. building usage);

- Produce customised maps as needed
- Investigate MoU provisions of public transport services (in case the municipality is unable to provide such for a certain period);
- Ensure adherence to Public Transport Regulations;
- Train personnel in first aid;
- Train all bus drivers in defensive driving and first aid;
- Ensure all relevant personnel are in possession of Public Driver's Permit (PDP)
- Ensure all busses have Passenger Transport Permit (Blue Paper);
- Create public awareness on public and non-motorised transport.

**RESPONSE**

- Ensure adherence to by-laws;
- Fines and penalties, compliance, enforcement;
- Amendment of the by-laws;
- Provide transport to affected people as need be;
- Transport the injured and dead bodies;
- Provision of labour/ provision of manpower.

**RECOVERY & REHABILITATION**

- Advice on possible solutions;
- Transportation of affected people to safe areas;
- Provision of labour/manpower.

*The Gateway to Endless Opportunities*

## 15. ROLES AND RESPONSIBILITIES OF OTHER STAKEHOLDERS

### TRANSNAMIB

#### SECTOR: Infrastructure Development

**Objective:** To ensure that actions shall be taken to prevent and prepare and recover from rail infrastructure failures and rehabilitation of damaged infrastructure prior, during and after disaster situations within the Windhoek municipal boundary

#### PREVENTION

- Annual Road risk assessment
- Safety awareness campaigns
- Routing and design of the rail
- Bi-annual rail safety audits
- Integrate disaster risk assessment in the planning and construction of Capital Projects and related infrastructure
- Conduct preventive maintenance of rail infrastructure;
- Conduct risk and vulnerability assessments and risk mapping;
- Integrate disaster risk assessment into environmental impact assessments in infrastructure developments;
- Adherence technical standards applicable to Rail transport;
- Advocate for risk consideration on the development of settlements
- Discourage settlement in high risk zones.
- Support the relocation of people settled in hazard prone locations ( 30 meters distance), railway reserve

#### MITIGATION

- Transportation plan (check with the Emergency Response Plan-ERP)

#### PREPAREDNESS

- Periodic Review of Emergency Response Plans ( ERPs)
- Conduct safety talks
- Establish Regional Control rooms
- Conduct unscheduled emergency drills ( ad-hoc)
- Have hazard specific plans eg. Ammonia nitrates

- Outline various life-line structures/infrastructure and also highlight the arrangements for the maintenance and management of these structures during disasters.
- Develop and agree on assessment tools - (testing)
- Assess hazard risks and map infrastructure at risk of damage from natural hazards;
- Plan for the mobilization of resources (finance, human and material) for rehabilitation of damaged infrastructure;
- Conduct public education and awareness programmes to sensitise the community on identified hazards and related issues.
- Monitoring and evaluation of operations.
- Establish hotlines ( 24 hours control room) to receive information on emergencies;
- Emergency response teams
- Hazard damage assessment mechanisms have been defined and tested and assessment teams have been trained on how to use tools appropriately;
- Regularly update resource inventory (personnel, equipment and emergency supplies)

#### **RESPONSE**

- Rapid disaster needs assessment;
- Emergency/Disaster damage assessment;
- Panel with departmental enquiries / Report ( part
- Investigations team ( e.g. accidents)

#### **RECOVERY AND REHABILITATION**

- Develop a recovery framework the company/TransNamib using the damage assessment findings;
- Support rehabilitation of damaged homes and public infrastructure;
- Promote build back better during rehabilitation of damaged infrastructure;

**NAMIBIA RED CROSS SOCIETY (NRCS)**

**SECTOR: Humanitarian**

**Objective:** To raise the profile of DRR and ensure that early warning information against potential emergencies is clearly

communicated to the communities and DRR stakeholders.

#### **PREVENTION**

- Conduct public awareness and campaigns on disaster risk management through (print and electronic media) community meetings and outreach;
- Development of and Advocacy Strategy for DRR – adapted to target audience at national, regional and local level respectively;
- Identify core advocacy concerns, including resource requirements and contribute key messages to broader disaster risk reduction advocacy initiatives of the NDRMS actors;
- Build national and community response capabilities
- Develop hazard monitoring and early warning services, from global to community levels
- Promote diversification of livelihoods e.g. non-agricultural income generating projects;

#### **MITIGATION**

- Education and awareness raising

#### **PREPAREDNESS**

- Regularly update resource inventory (personnel, equipment and emergency supplies)
- Develop contingency plans;
- Plan and monitor activities;
- Mobilize resources for activities
- Produce disaster risk management awareness materials

#### **RESPONSE**

- Continue monitoring early warning and disaster of triggers;
- Provide Humanitarian assistance
- Home based care programme

## RECOVERY AND REHABILITATION

- Assess community needs in disaster recovery.
- Provide support in resource mobilization for sector's recovery programmes;
- Provide relief items
- Render psychosocial support
- Collate and disseminate good practices and lessons learned.
- Monitoring of recovery programmes

## NAMIBIA CHAMBER OF COMMERCE AND INDUSTRY (NCCI)

### SECTOR: Business sector representative

**Objective:** To raise among members and ensure that early warning information against potential emergencies is clearly communicated to the business community.

## PREVENTION AND MITIGATION

- Conduct risk and capacity assessments for the sector;
- Risk mapping
- Mainstream disaster risk reduction into the business sector plans
- Mapping of available financial and human resources, as well as skilful people
- Education and awareness raising

## PREPAREDNESS

- Develop and agree on disaster assessment tools;
- Training of members in DRR and Business Continuity principles
- Develop an overall sector response plan, and integrate DRR into contingency plans
- Develop Standard Operational Procedures
- Regularly update resource inventory (personnel, equipment and emergency supplies)
- Mobilize resources for activities for the sector;
- Monitor and evaluate sector's programmes.
- Develop an exit, or transition, strategy for the sector

## RESPONSE

- Undertake rapid assessment in initial phase of disaster –identifying immediate needs;

## RECOVERY AND REHABILITATION

- Assess community needs in disaster recovery.
- Mapping of damage and destruction
- Collate and disseminate good practices and lessons learned.

## Nampower

### SECTOR: Infrastructure Development

**Objective:** To take actions to prevent, prepare and recover from electricity and related infrastructure failures and rehabilitation of damaged infrastructure prior, during and after disaster situations

## PREVENTION

- Multiple In-feed at van Eck (from one single distribution/location)
- N-minus One (routing?)
- Discussions on Alternative power supply feasibility studies,
- master plans, and design of projects
- second in-feed ( advised/recommend)
- Environmental impact
- Conduct risk and vulnerability assessments and risk mapping;
- Integrate disaster risk assessment into environmental impact assessments in infrastructure developments;
- Conduct preventive maintenance of infrastructure;
- Initiate discussions with Local Authorities on relocation of people settled in hazard prone locations to safer locations; (power lines settlements)
- Discourage settlement in high risk zones.
- Community engagement and Join education program

## MITIGATION AND PREPAREDNESS

- Crisis management Plan ( in place)
- Alternative power supply
- N-1 (routing?) Alternative power supply lines
- Develop a Joint Infrastructure (power stations) safety and security strategy
- Develop and agree on assessment tools;
- Assess hazard risks and map infrastructure at risk of damage from natural/man-made hazards (strategic and operational risk;
- Implement international standards such as ISO 9001,14000 and OSHAS 18001, ISO 55001
- Take Mitigation actions
- Ensure operational risk registers are in place
- Implement the Business continuity Policy
- Business continuity Plans ( business unit-specific)
- Plan for the mobilization of resources (finance, human and material) for rehabilitation of damaged infrastructure
- Conduct public education and awareness programmes to sensitize the community on dangers of misuse of electricity
- 24/7 hour control room (24 Hotline) 205 2345 public and direct link between NamPower and CoW
- Monitoring and evaluation of sector's programmes.
- Equipment's, spares and strategic spares
- Regularly update resource inventory (personnel, equipment and emergency supplies)
- Establish an emergency response team and train such a team ( to be aligned with ISO)
- Establish a joint multi-disciplinary response team ( Nampower and CoW)
- Other MoUs in place
- MoU to support joint operations in progress
- Scheduled Simulations/drills ( every six months) – equipment and operational specific
- Alternative control centre ( disaster recovery centre)

## RESPONSE

- Conduct a disaster damage assessment;
- Activate the emergency response team/units
- Activate the Crisis Management Plan
- Ensure alignments operation with ISO 22301
- Room for setting up Task Team for joint operation

## RECOVERY AND REHABILITATION

- Business Continuity Plan for each section (recovery framework)
- Compile events or incident Reports/ assessment
- Conduct a post mortem review assessment as per the Business Continuity Plan
- Provide technical advice on the rehabilitation of electricity infrastructure
- Promote build back better during rehabilitation of damaged infrastructure;

## NAMIBIAN POLICE (NAMPOL)

**Sector:** Safety and security

**Objective:** To ensure vulnerable persons have protected and prevent injuries due to recurring natural hazards.

## PREVENTION

- Establish and enforce policies, procedures and standards
- Identification of Hotspots/hazards.
- Pre-position of emergency resources.
- Join planning among the stakeholders.
- SOP
- Stakeholders' coordination and engagement.
- Awareness creation (use of media e.i Radio)
- Conduct drills
- Hazard Identification and Mapping/Zoning.
- Influence policies development.
- Physical protection; informed planning, environmental stewardship, disaster-resilient design;
- Permanent relocation of vulnerable communities to safe and less vulnerable locations;
- Integrate basic disaster risk reduction measures in NAMPOL
- Permanent relocation of vulnerable Communities to safe and less vulnerable locations

## MITIGATION AND PREPAREDNESS

- Use of open space for assembly point/relocation place.

- Prior political engagement.

## **PREPAREDNESS**

- Join planning among the stakeholders.
- Develop and agree on disaster assessment tools
- Draft operation program
- Maintain law and order
- Training of staffs
- Stakeholders' coordination and engagement.
- Community Education
- Defined plan
- Identify organizations with required items, services or supplies and make arrangements to secure these during emergencies;
- Mobilize resources for activities for the sector;
- Advocate for an emergency component in NAMPOL sector plans and budgets, including preparedness plans;
- Develop and track appropriate early warning signs and triggers for disasters in the NAMPOL sector;
- Develop an exit, or transition, strategy for the sector.

## **RESPONSE**

- Provide emergency assistance to disaster affected community (as per plan).
- Crowd control
- Develop minimum standards for NAMPOL in Chronic Emergencies and Disasters
- Train NAMPOL in disaster risk management;
- Escort of emergency operator to prevent further accidents.
- Sharing of information between stakeholders.
- Identification of recovery Centre
- Protection of the scene/ Evidence.
- Safety of the Emergency team
- Risk assessment
- Taking over the scene.

#### RECOVERY AND REHABILITATION

- Develop and agree on disaster assessment tools;
- Develop reconstruction policy to ensure standards for safety (to build back better), right sizing (building to relevant standards), right siting (relocation, land use, and master planning);
- Advocate for a disaster risk reduction component in NAMPOL sector plans and budgets;
- Assess community capacity and resources for recovery;
- Assess psychosocial impact of disaster among affected Communities and provide appropriate counselling;

#### MINISTRY OF HEALTH AND SOCIAL SERVICES

**Sector:** Health and Nutrition Sector

**Sector Objective:** To ensure a safe, sustainable, and health-enhancing human environments, protected from social, biological, chemical, and physical hazards, and promoting human security before, during and after disasters;

#### PREVENTION

- Conduct risk and vulnerability assessments, diseases and nutrition surveillance;
- Provide, locate and construct health facilities in safe areas;
- Prevent and control communicable diseases including TB, Cholera, Malaria, HIV and AIDS;
- Promote an integrated, comprehensive, multisectoral and multidisciplinary approach to reduce the impact of natural, technological or manmade hazards on public health
- Strengthen the institutional capacity of the health sector in preparedness and risk reduction,
- Strengthen local strategies and plans to address all forms of social disadvantage and vulnerability that have a negative impact on health;
- Permanent relocation of vulnerable Communities to safe and less vulnerable locations

#### MITIGATION

- Conduct indoor residual sprays in the rural settlements
- Conduct diseases surveillance and contact tracing on all communicable diseases;
- Conduct sampling for laboratory analysis
- Continuous community health education
- Conduct training of staff members in various disciplines

## PREPAREDNESS

- Conduct health facilities vulnerability assessment;
- Listing of all hospitals and primary health centres including private nursing homes and their capacities.
- Develop and agree on disaster assessment tools;
- Conduct Epidemiological Surveillance
- Develop Health sector contingency plan;
- Map all hospitals and primary health centres including private nursing homes and their capacities (Listed bulletin number two)
- Pre-position of emergency medical and non-medical supplies;
- Establish epidemic thresholds at local, regional and national levels;
- Mobilize resources for activities for the sector,
- Identify organizations with required items, services or supplies and make arrangements to secure these during emergencies;
- Training sector staff,
- Regularly update resource inventory (personnel, equipment and emergency supplies)
- Prepare of guidelines for diagnosis, treatment and management of disease with potential for epidemics;
- Conduct health campaigns to raise awareness of disease outbreaks and promotion of positive health practices;
- Monitor and evaluate of sector's programmes.
- Mobilise resources for child supplementary/therapeutic feeding;
- Develop an exit, or transition, strategy for the sector;
- Conduct nutrition surveillance and management of moderate and severe malnutrition;
- Develop hospital preparedness plans and conduct drills

## RESPONSE

- Conduct Search and Rescue and Triage
- Promote and protect the health and well-being of affected communities, paying particular attention to the specific needs of vulnerable groups
- Undertake mass casualty treatment and case management;
- Re-establishment of disrupted essential care services for women and children, including the provision of essential drugs, diagnostics and supplies
- Conduct disease surveillance and strengthening of health service delivery;
- Dissemination of key health education and promotional messages and behaviour-change communication to affected populations on diseases vector control, immunization including food and water quality monitoring;

- Provide PLWHA and other chronic illnesses with uninterrupted treatment
- Promote safe delivery and provide reproductive health services
- Conduct nutrition surveillance and management of moderate and severe malnutrition;

#### **RECOVERY AND REHABILITATION**

- Initiate a gap analysis of local and national capacities in health, and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction
- Assess damages to health infrastructure including water and sanitation facilities, hospital equipment and medical and non-medical supplies;
- Mobilize resources for rehabilitation of damaged infrastructure and replacement of damaged equipment, and supplies;
- Assess community capacity and resources for recovery;
- Assess psychosocial impact of disaster among affected communities;
- Provide psychosocial support and counselling services to communities in need;
- Provide supplementary and therapeutic feeding for children at risk of malnutrition;
- Utilize reconstruction policy to ensure standards for safety (to build back better), right sizing (building to relevant standards), right siting (relocation, land use, and master planning);
- Institute public works programme for health facility reconstruction (cash or food for work),
- Render counselling services
- Psychosocial support (material, physical, mental)

#### **EMERGENCY MEDICAL SERVICES**

##### **Sector : Emergency Medical Service Provision**

**Objective:** To ensure a safe, sustainable, and health-enhancing human environments, promoting human security before, during and after disasters;

#### **PREVENTION**

- Conduct risk assessments
- Public Education
- Promote an integrated, comprehensive, multi-sectoral and multidisciplinary approach to reduce the impact of natural, technological or manmade hazards on public health
- Strengthen the institutional capacity of the medical emergency services sector in preparedness and risk reduction,
- Strengthen local strategies and plans to address all forms of social disadvantage and vulnerability that have a negative impact on health;

## MITIGATION

- Continuous practitioner's health education
- Conduct training (capacity building of members)

## PREPAREDNESS

- Conduct Health facilities vulnerability and capacity assessment;
- Listing of all hospitals and primary health centres including private nursing homes and their capacities.
- Develop and agree on disaster assessment tools;
- Develop pre-hospital emergency contingency plan;
- Pre-position of emergency medical and non-medical supplies;
- Continuous training in various aspects of emergency management (e.g. hazmat,)
- Mobilize resources for activities for the sector;
- Identify organizations with required items, services or supplies and make arrangements to secure these during emergencies;
- Regularly update resource inventory (personnel, equipment and emergency supplies)
- Adhere to standard guidelines for treatment and management of disease with potential for epidemics;
- Conduct health campaigns to raise awareness of disease outbreaks and promotion of positive health practices;
- Monitor and evaluate of sector's programmes.
- Develop an exit, or transition, strategy for the sector;
- Develop pre-hospital and hospital preparedness plans and conduct drills
- Develop Memorandums of Understandings (MoU) with stakeholders

## RESPONSE

- Conduct Search and Rescue and Triage
- Undertake mass casualty treatment and case management;
- Strengthening of medical emergency service delivery;

## RECOVERY AND REHABILITATION

- Conduct a gap analysis of Emergency Medical Services local capacities and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction

*The Gateway to Endless Opportunities*

## 16. CITY OF WINDHOEK DISASTER RISK MANAGEMENT COMMITTEE (DRMC)

The committee was established in accordance with Section 17 (7) of the Act and reinforced by Council Resolution no. 259/09/2014 and consists of the following members:

- The Mayor, as Chairperson
- Deputy Mayor, as Vice Chairperson;
- The Strategic Executive for the Economic Development and Community Services Department, as the Head of the Disaster Risk Management Centre;
- All Strategic Executives;
- The Head: City Police and;
- The Manager for the Disaster Risk Management Division.

The responsibilities of Disaster Risk Management Committee are outlined in Section 17 (7) of the Act as follows:

*In addition to any duty or function imposed by law on any local authority committee or Council, a local authority committee through the local authority disaster risk management centre is responsible for performing the following duties and functions –*

- (a) *Promote an integrated and co-ordinated approach to disaster management in the local authority area, with special emphasis on prevention and mitigation by –*
  - (i) *departments and other internal units within the administration of the local authority.*
  - (ii) *all entities operating in the local authority area; and*
  - (iii) *other role-players involved in disaster management in the local authority area.*
- (b) *Conduct disaster risk assessments within the local authority's area of jurisdiction.*
- (c) *integrate the local authority's disaster risk management plan into the regional disaster plan.*
- (d) *Prepare and update the local authority's response and recovery plans.*
- (e) *Co-ordinate disaster risk management activities in the local authority area.*
- (f) *Mobilise resources for disaster risk management in the local authority area.*
- (g) *Facilitate the implementation of public information and public awareness programmes in its area.*
- (h) *Act as primary responding and mitigation agent within the existing capacities of the community.*
- (h) *Act as the channel of communication for the community on all issues related to disaster risk management.*
- (i) *In partnership with stakeholders participate in disaster risk assessments processes and facilitate the development of disaster risk management planning.*
- (j) *Ensure the development, implementation, and maintenance of disaster risk reduction strategies, which will result in resilient areas, communities, households and individuals.*
- (k) *Facilitate the development of disaster response and recovery plans.*
- (m) *Co-ordinate the testing of sectoral and regional contingency plans.*

- (n) *Assist with the establishment of mechanisms for creating public awareness to instil a culture of risk avoidance.*
- (o) *Guide the development of a comprehensive information management and effective communication system.*
- (p) *Align regional early warning systems and facilitate the establishment of a regional disaster risk information database.*
- (q) *Make provision for education, training, and research strategy.*
- (r) *Monitor compliance with any disaster risk management policy formulated and developed in terms of section 2 and ensure the integration of such policies into development planning at regional level.*
- (s) *Promote the recruitment, training, and participation of volunteers in disaster management in the local authority area.*
- (t) *Liaise and consult with the Directorate on all issues pertaining to disaster risk management; and*
- (u) *Submit quarterly and annual reports, minutes of meetings and resolutions made by the local authority service and any information related to disaster risk management to the local authority Council for submission to the Directorate.*

## **17. THE EMERGENCY & DISASTER RISK MANAGEMENT DIVISION**

The City's Emergency & Disaster Risk Management Division co-ordinates the on-going activities of the disaster risk management programme and resides in the Economic Development and Community Services (EDCS) Department. The division is the executing arm of the Disaster Risk Management Centre.

## **18. PRIORITY CROSS-CUTTING ISSUES**

Each sector should ensure integration of agreed priority cross-cutting issues regarding needs assessment, analysis, planning, monitoring and response (e.g. environment, climate change, gender, HIV/AIDS and poverty reduction). All sectors must also contribute to the development of appropriate strategies to address these issues.

## **19. ROLES OF INDIVIDUALS, FAMILIES AND COMMUNITIES**

Individuals, families and the community collectively play a role in determining how well communities are safe-guarded from hazards and the degree of resilience of communities. Households have a principal responsibility to safe-guard property and assets against natural and technological hazards risks. This is done through risk identification, mitigation and the use of adequate property and contents insurance instruments.

In addition, the public must be provided with educational/instructional materials and presentations on identified/common hazards.

## **20. PRIVATE SECTOR**

Disaster Risk Management is a shared responsibility and the establishment of public/private sector partnerships is essential to making disaster risk reduction a priority. The private sector plays a vital role in addressing disaster risk management especially, in terms of availing and mobilising resources, providing assistance with technical input, implementing safe work practices, conducting risk and vulnerability assessments and mainstreaming disaster risk reduction into projects.

There are many ways in which the private sector can contribute to disaster risk reduction such as, improving capacity to ease logistics in crises and providing support in field-based emergency tele-communications. Co-ordination efforts with businesses and industries are driven by the Head of the Disaster Risk Management Centre.

## **21. TRAINING AND RESEARCH**

Promoting a culture of disaster risk reduction among stakeholders requires capacity building through integrated education, training and public awareness programmes, which are informed by scientific research. Therefore, the City must interact with tertiary institutions to identify priorities for collaborative research and development that promote disaster risk reduction.

## **22. ROLE OF THE MEDIA**

The media is an important primary source of disaster risk information. It significantly influences how the population and the government views, perceives and responds to hazards and disasters. Therefore, the media must be encouraged to emphasise the underlying causes and assist in promoting a culture of risk-avoidance amongst Windhoek's residents. The media should inform the public on the importance of understanding early warnings and, reinforce the need for residents to take heed of early warnings and act accordingly (e.g. refrain from erecting structures illegally).

As such, the City's DRMC must establish and manage ongoing relations with relevant media stakeholders, to derive maximum benefit from media coverage, pertaining to disaster risk management activities.

## **23. OTHER INSTITUTIONAL FACILITIES**

To ensure disaster preparedness, the City of Windhoek will work closely with public and private entities that provide essential services (e.g. NAMPOWER, NAMWATER and Telecom Namibia).

To ensure public safety, schools, hospitals, old age homes and other institutional facilities, will also be encouraged and assisted to develop and maintain emergency/disaster plans.

## **24. PLAN DEVELOPMENT**

This plan is the City's principal source document for emergency and disaster management activities. Most key agencies, division and departments have responsibilities for developing and maintaining procedures consistent with this plan.

The Emergency & Disaster Risk Management Division will co-ordinate the overall process. That said, departmental heads (Strategic Executives) are not relieved from their responsibilities for emergency planning.

## **25. PLAN REVIEW**

According to the Act, disaster risk management plans must be reviewed every three (3) years or after a significant event.

### **25.1. Post Disaster Review**

Within three (3) months after each disaster or major emergency, the Emergency & Disaster Risk Management Division will conduct a post-disaster review in collaboration with all departments. The review includes disaster prevention, preparedness of public and private sector, the emergency operation, recovery and rehabilitation. The review will formulate specific recommendations for revision of disaster plans and other actions to improve the performance in future natural disasters. A report and recommendations will be submitted to the City's Disaster Risk Management Committee (DRMC) to consider the recommendations and direct further action.

## **26. DISTRIBUTION**

The Disaster & Emergency Risk Management Division is responsible for the distribution of this plan and for maintaining a control system. It is the responsibility of all divisions/departments and agencies in possession of this plan to affix partial updated and supplementary portions to the plan in the appropriate location.

## 27. EMERGENCY MANAGEMENT OPERATIONAL PROCEDURES (EMOP)

The Emergency Management Operational Procedures (EMOP) provides a management structure and system for conducting on-site operations. It is applicable to small-scale operational activities as well as major mobilisations. EMOP provides command centre and operational staff with a standardised operational structure and is activated via the disaster risk management structures (e.g. City of Windhoek Disaster Risk Management Committee

Therefore, this document will be regularly reviewed and amendments will be forwarded to the responsible Disaster Risk Management function.

### 2.1. Principles

Efficient and effective emergency management is grounded on the following principles:

- None duplication of efforts and resources;
- Clear understanding of roles and responsibilities for every emergency situation and;
- Timely implementation of appropriate interventions to save lives, property and environment.

Disaster relief should be timely and responsive enough to make the interventions as effective as possible. Disaster risk management plans should also be robust enough to respond to changing characteristics of given hazards. The Emergency Management Operation Procedures (EMOP's) identifies the key activities needed during an emergency response.

EMOP's are the foundation of any crisis management plan and were developed in terms of *Section 8.4.2 of the National Disaster Risk Management Policy (2009)*. They are a set of standard procedures designed to operationalise the disaster response and/or contingency plans pertaining to a range of emergencies that may affect Windhoek.

EMOP's specify the way in which individuals or sectors should execute their functions. EMOP's also provide standard response procedures as well as individual emergency procedures, for the various sectors at operational level.

### 27.2. Objective

The objective of EMOP's is to provide guidelines for the effective and timely response to threats or the impact of natural and human-induced hazards.

### 27.3. Purpose of the EMOP

EMOP's provide guidance and operational procedures to eliminate or reduce the adverse effects of disasters, to save lives, protect livelihoods and minimise damage to assets and mitigate emergencies. They also identify the responsibilities vested in emergency response institutions.

### 27.4. Who will use the EMOP?

The EMOP is intended for all City departments, disaster risk management stakeholders, development partners, Civil Society Organisations and communities, responding to emergency situations.

### 27.5. When will EMOP be Used?

EMOP's implemented during any emergency, disaster or significant event where life, livelihoods, property and environment are threatened by natural and human-induced hazards, such time as or when:

- An emergency or a disaster occurs or is imminent;
- The City's DRMC requests appropriate departments to perform emergency operations in response to a hazard/incident that has the potential to escalate to an emergency or disaster, with adverse effects;
- An emergency or disaster is declared by the Head of State.

### 27.6. Scope of EMOP

The EMOP will cover any situation where response needs are sufficiently large-scale and where significant assistance and resources are required. EMOP's will also be deployed where a multi-sectoral response is needed.

### 27.7. Emergency Operations

The City of Windhoek has adopted the National Disaster Risk Management System (NDRMS) which has four operational modes namely:

- Readiness;
- Crisis;
- Emergency and;
- Recovery

*Table 5 below provides details of the four NDRMS modes.* The Emergency Operations Centres (EOC's) are responsible for signalling the need to respond and, for managing the shift from one operational mode to another, depending on conditions.

**Table 5: Emergency Operational Modes**

Mode	Focus	Key Activities
Readiness Mode	Preparedness	<p>Sectors are preparing for the worst case scenario through:</p> <ul style="list-style-type: none"> <li>Contingency planning;</li> <li>Identifying and training critical staff;</li> <li>Pre-positioning critical supplies;</li> <li>Making necessary arrangements with stakeholders, suppliers, partners and contractors;</li> <li>Reviewing safety and security procedures and;</li> <li>Monitoring triggers for worst case scenarios.</li> </ul>
Crisis Mode	Crisis management, humanitarian response and operational continuity	<p>This is the warning phase characterised by actions taken upon receipt of an internal or external warning of an impending emergency. Activities are directed by the chairperson of the City’s DRMC and activities include:</p> <ul style="list-style-type: none"> <li>Assessing trigger level to activate response plan;</li> <li>Convening meetings of City’s DRMC;</li> <li>Verifying disaster alerts; Monitoring crisis and ensuring preparations are in place for evacuation of at risk communities.</li> </ul>
Emergency Mode	Continuation of critical functions, and lifesaving assistance	<p>The mode is characterised by actions to respond to an emergency after trigger thresholds are surpassed. This is the emergency response mode in which the effects of disasters will be realised if no action is taken. Activities in this mode include:</p> <ul style="list-style-type: none"> <li>Activation of the DRM plan;</li> <li>Conducting rapid needs assessments;</li> <li>Search and rescue;</li> <li>Evacuating people at risk;</li> <li>Providing humanitarian assistance;</li> <li>Declaring a state of emergency/disaster, if situation escalates; beyond capacity of City of Windhoek and the Region;</li> <li>Early recovery.</li> </ul>
Recovery Mode	Recovery and rehabilitation	<p>This is the recovery phase which requires the following actions:</p> <ul style="list-style-type: none"> <li>Deactivation of emergency operations;</li> <li>Continuous monitoring of situation;</li> <li>Conducting damage and loss assessments;</li> <li>Prioritising recovery actions;</li> <li>Preparation of early recovery frameworks;</li> <li>Mobilising resources (financial, human and material) for recovery;</li> <li>Initiating recovery and rehabilitation of key installations (public services)</li> <li>Restoration livelihoods.</li> </ul>

### 27.8. Inter-sector and Sector Co-ordination

The above modes ensure that multi-sectoral co-ordination is continuously provided by the City's DRMC and EDCS Department and specifically, the DRM Division, through sector leads.

### 27.9. Notification

The SE: EDCS, CEO and specialist units responsible for monitoring early warning signs are mandated to inform the chairperson of the City's DRMC and stakeholders on any situation that warrants the response of the City's disaster risk management system. A notification form should be devised and used to alert stakeholders of early warning information, concerning imminent or actual emergencies in the crisis mode.

Upon indication of an imminent or actual emergency/disaster, the Specialist Units (e.g. Namibia Meteorological Services, Health & Environment, Disaster & Emergency Management), the SE: EDCS via the CEO or any authorised person, shall notify the chairperson of the DRMC. In addition, the DRMC can obtain information about any situation via other sources and verify the information's credibility through the Specialist Units. Depending on the nature, magnitude and severity of the emergency/disaster, the DRMC shall notify the Regional DRMC as well as critical players/key personnel of agencies whose assistance is required to co-ordinate the emergency response.

The figure below is a diagram of the notification process used during an emergency/disaster event:

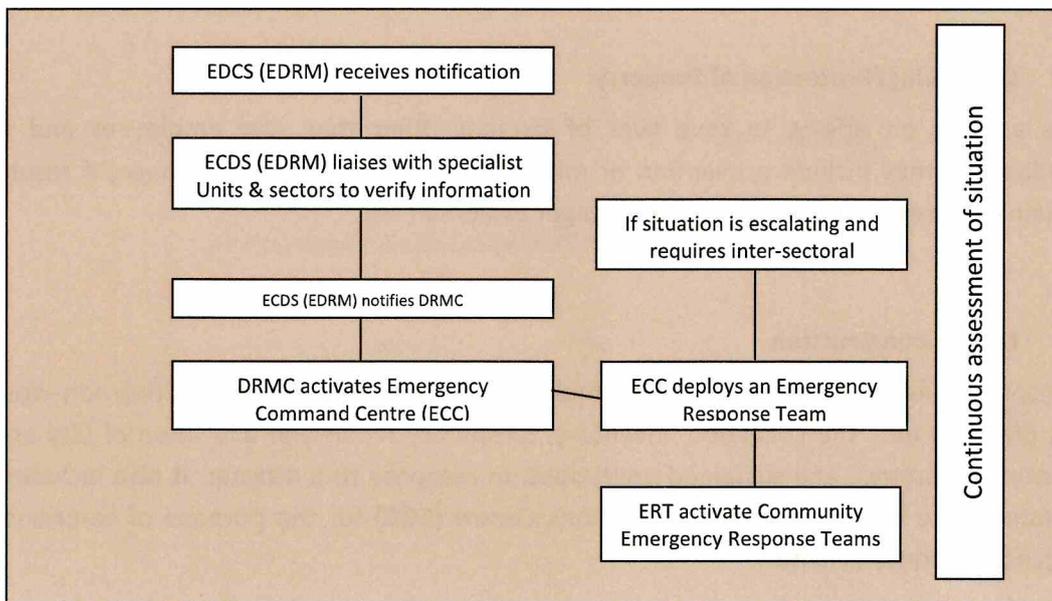


Figure 2: Actions to be taken on receipt of notification

## **28. EMERGENCY RESPONSE**

A rapid assessment should be conducted within the first 36 hours of receiving information about a disaster situation. The assessment should identify the problems, the problem sources and consequences, determine whether response strategies should be mounted.

Rapid assessment should be conducted as an inter-sectoral exercise involving a mix of specialists and generalists. A rapid field assessment form must be devised to guide the type of information required.

A rapid field assessment is followed by detailed and continuous assessments that provide additional and updated information about the disaster situation such as:

- Understanding critical needs;
- Resources and;
- Constraints, etc.;

## **29. RESPONSE PRIORITIES IN A MAJOR EMERGENCY/DISASTER**

### **29.1. Self-preservation**

Self-preservation within City's context refers to the protection of employees and their dependants, from the effects of a disaster which takes first priority. The expectation is that employees' families are prepared to be self-reliant after the initial incident. This will allow employees to provide timely life-saving services and other critical operations effectively and with minimal interruptions. Self-preservation also includes immediate actions taken before, during and after an emergency or disaster event.

### **29.2. Life-saving/Protection of Property**

This is a focus on efforts to save lives of persons other than City employees and their dependants. It may include prevention or mitigation of major property damage, if results of such damage, present a likely immediate danger to human life.

### **29.3. Unit Reconstruction**

Unit reconstitution is the recall of critical employees, (if the incident occurs during non-working hours, off-duty) and, the collection, inventory, temporary repair and allocation of City assets. This optimises prompt and sustained operations, in response to a disaster. It also includes the activation of the City's Emergency Operations Centre (**EOC**) for the purpose of co-ordinating emergency response activities.

### **29.4. Emergency Food and Shelter**

The provision of food and shelter, for disaster victims is an immediate priority primarily, through the Namibia Red Cross Society (NRCS) with co-ordination by the Emergency Operations

Centre (EOC). The City has a Memorandum of Understanding (MoU) with the Namibia Red Cross Society.

### **29.5. Restoration of Infrastructure**

The restoration of Windhoek's critical infrastructure (e.g. utilities, roads, bridges, buildings) is of prime concern and requires the co-ordination of local and governmental agencies as well as the private sector.

### **29.6. Recovery**

Recovery refers to the restoration of lost or impaired capabilities caused by the effects of the disaster or contingency. It also includes a return to normal operating conditions and providing non-emergency services to the public.

## **30. DECLARATION OF A LOCAL DISASTER**

According to *Section 38 (1) of the Disaster Risk Management Act, 2012 (Act 10 of 2012)*, the head of a Local Authority disaster risk management centre may, after consulting the Directorate of Disaster Risk Management in the Office of Prime Minister, recommend to the head of the Local Authority Council (Mayor), that a local disaster be declared for the whole of or any part of the local authority area.

Upon receipt of the above recommendation, the Mayor must in writing inform the Regional Governor of the disaster situation. The Regional Governor must in writing inform the Prime Minister and the Prime Minister must recommend to the President, to declare a state of disaster for the whole of or any part of the Local Authority area.

### **The President may declare that a local disaster exists only if:**

- a) a specific risk exceeds the capabilities of the single local authority to manage it effectively;
- b) the risk results in the same type of event occurring repeatedly and at different times in the local authority area with negative impact on lives, property and the natural environment; or
- c) the event or process affects the local authority area and exceeds the capabilities of a single local authority to manage it effectively.

A declaration of a local disaster remains in force until such time that it is revoked by the President by proclamation in the *Gazette* or it ceases to have effect in terms of the provisions of Article 26 of the Namibian Constitution.

### **31. AUTHORISED OFFICERS FOR A LOCAL DISASTER**

In line with Section 39 (1) of the *Disaster Risk Management Act, 2012 (Act 10 of 2012)*, during a local disaster the chairperson of the Local Authority Committee (Mayor) may designate City staff members or appoint other persons as authorised officers for such periods and for such areas and subject to such conditions as may be specified in the instrument designating or appointing the staff member or person.

An authorised officer designated or appointee in terms of the said Act may, subject to necessary changes required by context, perform functions and exercise powers conferred on an authorised officer in terms of sections 33 and 34 of the said Act, as if he or she were an Authorised officer referred to in Section 32 of the Act.

### **32. STAND DOWN OF DISASTER RESPONSE**

The chairperson of the DRMC may issue a notification cancellation to indicate that no further action is required either because the anticipated emergency/disaster did not occur or that the actual incident has been controlled. When a state of emergency has been declared, the end of the emergency period should be announced through the recommended channels.

CITY OF VICTORIA

*The Gateway to Endless Opportunities*

### 33. GLOSSARY OF TERMS

- 1.1 All Hazards Planning** - A method of disaster planning which addresses all natural and manmade (technological) emergencies and disasters to which a jurisdiction might reasonably be vulnerable.
- 1.2 Annexes** - Additions to the DRM Plan which provide more specific information regarding policies, responsibilities and procedures within a given functional area.
- 1.3 Appendix or Appendices** - A collection of supplementary material at the end of a plan or annex. These collections of materials are used to modify or clarify material in the plan or annex.
- 1.4 Assumption** - A supposition on the current or future situation, assumed to be true in the absence of positive proof. In the absence of facts, assumptions are used to fill gaps in what is known about a situation.
- 1.5 Basic Plan** - The main part of an Emergency Operations Plan (**EOP**), which establishes general policies, responsibilities and, procedures for implementing comprehensive emergency and disaster management.
- 1.6 Command Post** - A temporary centre in the vicinity of a disaster where the co-ordination and direction of on-scene response forces takes place.
- 1.7 Comprehensive Emergency and Disaster Management Plan** - A written basic plan with annexes, procedures and checklists, which address the natural and technological emergencies and disasters to which a jurisdiction is likely to be vulnerable.
- 1.8 Cordon** - This means a line of police posts or police lines surrounding a specific area.
- 1.9 Disaster** - means any serious disruption of the functioning of a community or society, posing a significant, widespread threat to human life, health, property or the environment, which exceeds the ability of the affected community or society to cope using its own resources.
- 1.10 Disaster Planning Process (Emergency Operations Planning)** - The process of anticipating need for future application of resources and determining the methods of obtaining and applying them during and after a disaster.
- 1.11 Disaster Risk Management** - means a continuous and integrated multi-sectoral and multi-disciplinary process of planning and implementation of measures aimed at - preventing or reducing the risk of disasters; mitigating the severity or consequences of disasters; emergency preparedness; a rapid and effective response to disasters; and post-disaster recovery and rehabilitation

- 1.12 Drills** - are often thought of as being smaller or lesser exercises. They are those activities conducted by field response units as a normal part of their on-going training and preparedness activities. A drill could involve the actual movement of equipment, etc. Drills are usually done with no activity or participation from an Emergency Operations Centre (**EOC**) or other co-ordination and control activity.
- 1.13 Emergency** - Describes an expected or unexpected event involving shortages of TIME and/or RESOURCES that places life and/or property in danger, and that requires response beyond that of normal incident resource.
- 1.14 Emergency Function** - A specific emergency activity provided in a co-ordinated manner through the integration of the skills and materials found within a jurisdiction for implementing comprehensive emergency and disaster management programs.
- 1.15 Emergency Operations Centre (EOC)** - A single, pre-selected location where disaster information is gathered, information is dispersed, and co-ordination of disaster response activity is carried out. The **EOC** acts as a resource centre for response activities. It is also the location where the executive officers of the City of Windhoek gather, assisting the co-ordination effort by making needed policy decisions in response to information gathered and funnelled to the **EOC**.
- 1.16 Emergency Operations Organisation (EOO)** - Members of Council, Strategic Executives and personnel of the City of Windhoek appointed for the purpose of emergency and disaster management, under the leadership of the Chief Executive Officer as chairman of the **EOO**, form the **EOO**. Their role is to support and maintain a complete co-ordinating and planning structure, extended to all response and support agencies involved in emergency activities. The **EOO** centralises the direction and control of the planning, co-ordination and management of emergency/disaster preparedness, mitigation, response and recovery. The **EOO** is an "operational" department responsible for the City's emergency preparations (planning, training and mitigation), response and recovery operations. It is a "department without walls" which comprises all Departments/Divisions of the City's government. It centralizes command and information co-ordination to enable its unified chain-of-command to operate efficiently and effectively in managing the City's resources.
- 1.17 Exercise** - Exercises are practical, efficient, and proven ways to improve the individual abilities of emergency service personnel and the overall capability of the emergency and disaster management system. Exercises consist of the performance of duties, tasks, or operations very similarly to the way they would be performed in a real emergency. However, the exercise performance is in response to a simulated event. Exercises require a simulated input to emergency personnel that motivates a realistic action. Exercises should develop and improve skills in operational procedures and decision-making. Exercises are management

tools useful for informing or training personnel and evaluating personnel performance or procedures.

- 1.18 First Aid Centre** - A temporary location designated at the scene of a disaster where emergency medical treatment can be effected.
- 1.19 Hazard** - Any situation that has the potential of causing damage to people, property or the environment.
- 1.20 Hazard Vulnerability Analysis** - This is actually two documents: 1) the hazard analysis, and 2) the vulnerability analysis of the community and the jurisdiction to the hazards identified in the first. Usually involves some definition of the composite risk to the community and jurisdiction posed by the hazards based upon the probability of the event occurring in the community - how vulnerable the community and jurisdiction is to the hazard.
- 1.21 Incident** - Describes an expected or unexpected event involving shortages of TIME that places life and/or property in danger, for which normal police, fire, emergency medical services, or utility response is adequate, and which does not require a more extensive government or community response effort.
- 1.22 Incident Command Post (ICP)** - The command centre at the scene of a disaster. This post would be comprised of several mobile command posts from Police, Traffic, Security, Fire, Ambulance, Disaster Management, etc.
- 1.23 Incident Command System (ICS)** - the management system used to direct all operations at an incident scene.
- 1.24 Incident Commander (IC)** - this is the officer or official designated to take overall responsibility and control of the entire task force involved with the disaster. He determines objectives and establishes priorities based on the nature of the incident, available resources and agency policy.
- 1.25 Information Centre** - a temporary location at the scene of a disaster for speedy gathering and transmittal of information. In major disasters the Information Press Centre should include political and service representation at a senior official level and should be located at the City of Windhoek Emergency Operations Centre (**EOC**).
- 1.26 Inner Perimeter** - an area designated to enclose the actual disaster site and will include the first-aid station and casualty clearing station.
- 1.27 Mass Care** - the act of supplying a range of basic human needs to those persons unable to provide for themselves in times of disaster. The actions that are taken to protect evacuees and other disaster victims from the effects of the disaster.

Activities include providing support needs to those people that have been displaced from their homes because of a disaster or threatened disaster.

- 1.28 Mobile Emergency Operations Centre (MEOC)** - a mobile unit which is basically an extension of the **EOC** and is capable of operating independently, without any other power source, to control multiple operational units in tactical command operations of fire, rescue, EMS, disaster management, law-enforcement, and to establish an effective communications network to provide a comprehensive communications distant from facilities out in the field where such resources previously would not have been accessible.
- 1.29 Outer Perimeter** - an area designated to enclose the disaster area and completely encircles it. This area will include the inner perimeter and leave ample area for setting up emergency centres and rescue operations. The outer perimeter is also used as control measure between the **EOC** and the **ICP** where all co-ordinated emergency response outside the perimeter is **EOC** responsibilities and vice-versa for the **ICP**.
- 1.30 Plan** - a scheme or method, formulated beforehand, for doing something in an orderly fashion. The document is essentially decisions made about an event, before the occurrence of the event.
- 1.31 Policy Group** - an executive disaster team which may be formed by a jurisdiction when it elects separate policy decisions from the co-ordinating activities of an **EOC**. The policy group would normally consist of the executive of a jurisdiction and the heads of response agencies, police, fire, traffic, security, infrastructure, etc.
- 1.32 Probability** - likelihood that an event will occur.
- 1.33 Public Information Officer (PIO)** - the **PIO** will co-ordinate all public information, public relation and media relation programs and procedures used by the **EOO**. The Public Information Officer is the official spokesperson of the **EOO**. The **PIO** reports directly to the Chief of Disaster Management (Civil Defence) (**CDM**).
- 1.34 Risk** - see Vulnerability
- 1.35 Shelter** - buildings or other facilities providing temporary lodging, and basic human needs.
- 1.36 Simulation** - simulation is a tool to create an artificial situation to which participants in an exercise respond. The situation attempts to approximate reality by using symbols, maps, drawings, scripts, or, in more elaborate exercises, films, videotapes, or computer graphics. The purpose of the simulation is to evoke responses to a perceived reality.

- 1.37 Staging Area** - a designated area within the outer perimeter to which responding personnel and agencies will report with rescue and other equipment when ready for assignments. Staging Areas are established for temporary location of available resources on short notice. Staging Areas will be established by the Incident Commander (IC) to locate resources not immediately assigned. A Staging Area, in which mobile equipment can be temporarily parked awaiting assignment, can be anywhere. Staging Areas may include temporary sanitation services and fuelling. Feeding of personnel may be provided by mobile kitchens or rations. Staging Areas should be highly mobile. The IC with the help of the Police shall assign a Staging Manager for each Staging Area.
- 1.38 Standard Operating Procedures (SOP)** - guidelines that clearly spell out what is expected and required of personnel during emergency response and non-emergency activities. They provide a mechanism to communicate legal and administrative requirements, organizational policies and strategic plans to personnel.
- 1.39 Terrorism** - the use of or threatened use of criminal violence against civilians or civilian infrastructure to achieve political ends through fear and intimidation, rather than direct confrontation.
- 1.40 Testing** - that specific function (when associated with an exercise or drill) which is designed to measure actual readiness capability of procedures, personnel, facilities, or equipment against required capabilities described in emergency operations plans.
- 1.41 Vulnerability** - means a set of conditions and processes rooted in conditions of physical, social, economic and environmental factors which increase the susceptibility of an individual or community to the impact of hazards.

*The Gateway to Endless Opportunities*

### 34. REFERENCES

1. City of Windhoek Disaster Management Plan, 2002
2. Local Authorities Fire Brigade Act (Act no. 16 of 2007)
3. Khomas Region Multi Hazard Plan, 2016
4. Namibia Disaster Risk Management Act, 2012 (Act 10 of 2012)
5. National Disaster Risk Management Plan 2011, Republic of Namibia, Directorate of Disaster Risk Management, Office of the Prime Minister



*The Gateway to Endless Opportunities*

### 35. Revision log

Date	Activity
08 April 2021	Served at the SE Forum
06 April 2022	Approved by Management Committee
16 May 2022	Approved by Council (Resolution 115/05/2022)



*The Gateway to Endless Opportunities*

